A CATALOGUE OF THE IRISH ICHNEUMONIDAE (HYMENOPTERA: ICHNEUMONOIDEA)

by

J. P. O'Connor, R. Nash and M. G. Fitton

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Front cover: *Banchus* species. Illustration by M. G. Fitton.

Dedicated to the memory of William Frederick Johnson (1852-1934) in recognition of his work on the Irish insects particularly the ichneumonids.

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Sponsored by the National Museum of Ireland

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National Museum of Ireland
Ard-Mhúsaem na hÉireann

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Preface

This is the final volume in the present series on the Hymenoptera of Ireland. Previous catalogues dealt with the Braconidae (Ichneumonoidea) (*Occasional Publication* **Number 4**), the Chalcidoidea (*Occasional Publication* **Number 6**) and the Platygastroidea & Proctotrupoidea (*Occasional Publication* **Number 7**). The catalogue of the Ichneumonidae provides data on the 1135 species definitely known from Ireland, of which 222 are new to the island. The authors hope that it will stimulate interest in these remarkable insects.

The Irish Biogeographical Society is very grateful to Dr Pat Wallace (Director), Mr Raghnall Ó Floinn (Head of Collections) and Mr Nigel Monaghan (Keeper of Natural History) of the National Museum of Ireland for their interest in this work. The Society is also indebted to the National Museums and Galleries of Northern Ireland for supplying the Curtis plates and, the National Museum of Ireland for permission to reproduce the photograph of W. F. Johnson and for its sponsorship. The support of the National Parks and Wildlife Services of the Department of the Environment is greatly appreciated.

J. P. O'Connor

General Editor,

The Irish Biogeographical Society,

18 July 2007

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Abstract

The Irish ichneumonid fauna is reviewed and a checklist provided. Data are given for 1137 definite species, of which 222 are documented from Ireland for the first time.

Introduction

The superfamily Ichneumonoidea contains two families *viz.* the Braconidae and the Ichneumonidae. The Irish species of the former taxon were reviewed by O'Connor, Nash and van Achterberg (1999). This catalogue covers the Ichneumonidae which is an extremely large family with in excess of an estimated extant 60,000 species worldwide (Townes, 1969a). Over 2100 species in 35 subfamilies occur in Great Britain (Noyes *et al*., 1999). The adults are small to very large insects, most species are fully winged (with the fore wing length 2-27mm). However, a small number are brachypterous or apterous. The antenna has 13 or usually more segments. The fore-wing venation is characteristic with the first discoidal and submarginal cells confluent and (except in one or two species) with 2m-cu present. The majority are bisexual. Adults are often seen feeding on flowers. Noyes *et al.* (1999) give a comprehensive list of references for identifying ichneumonids.

Almost all ichneumonids are parasitoids of insects or arachnids and the greatest numbers and diversity of species occur in the cool temperate areas of the world. The host range of the whole family is restricted to immature stages of endopterygote

insects, spider egg sacs, spiders themselves, and the egg nests of a pseudoscorpion. The family includes idiobionts and koinobionts. Most species develop solitarily, intimately associated, as an ecto- or endo-parasite, with a single host individual which is eventually killed. A few species develop in gregarious broods, but none is known to be polyembryonic. A small number of species, such as those which develop in spider egg sacs, consume multiple host 'individuals' and behave more like specialised predators than parasites. Some subfamilies comprise or include hyperparasites, including facultative- and pseudo-hyperparasites. Most ichneumonid species are bisexual and arrhenotokous, but a few normally are composed entirely of females and are thelytokous.

Compared to the two other immense groups of parasitic Hymenoptera, the Chalcidoidea and the Braconidae, the ichneumonids have a peculiarly limited range of hosts. Nor do they exhibit as many spectacular, bizarre and complex life-histories. Their adaptations tend to be less obvious and more subtle, but, measured in numbers of species in temperate areas, the Ichneumonidae can be considered more successful.

Host associations

Lepidoptera are the hosts of an estimated 64% of the 2000 or so British ichneumonid species, whilst a further 24% utilize Symphyta. In Britain the ratio of ichneumonid species parasitic upon Lepidoptera to Lepidoptera species is approximately 1 to 1.7, and for those parasitic on sawflies the corresponding ratio is 1 to 1.1. Probably the best known ichneumonid life history is that in which the female oviposits into or on a lepidopteran caterpillar and the resultant adult parasite emerges from the host's cocoon or pupa. Most species of the subfamilies Campopleginae, Anomaloninae, Cremastinae, Ophioninae, Banchinae, Stilbopinae, Metopiinae, Alomyinae and Lycorininae fall more or less into this category, as do many Ichneumoninae, some Tryphoninae, and a small number of Ctenopelmatinae. The members of all of these subfamilies except the Tryphoninae, and possibly the Lycorininae, develop as endoparasites. Each group exploits its lepidopterous hosts in different ways. Obvious variations include attacking hosts in particular niches (for

example, in leaf rolls or those which feed at night); oviposition into very young or into fully-grown host larvae; and killing and leaving the host before it has made its own cocoon (including, in some campoplegines, well before it is fully grown). Many ichneumonines search out hosts which have already constructed cocoons or have already pupated and this is the strategy of the members of the ectoparasitic subfamily Cryptinae and of many ecto- and endoparasitic pimplines.

Most species of Ctenopelmatinae, Adelognathinae and Tryphoninae, together with some campoplegines, attack the caterpillar-like larvae of many sawflies. The larvae of stem-sawflies (Cephidae) are parasitized by Collyriinae, whilst the larvae of xyelids are the hosts of *Idiogramma* (Tryphoninae) and *Gelanes* (Tersilochinae). The cocoons of sawflies are attacked by cryptines, notably members of the tribe Hemigastrini. The larvae and pupae of woodwasps (Siricoidea and Xiphydrioidea) are the hosts of rhyssines, and a range of other groups which attack wood borers.

As well as the Symphyta, several other groups of Hymenoptera serve as hosts for ichneumonids. Orthopelmatinae parasitize cynipid larvae. A range of Cryptinae, Pimplinae, Poemeniinae, Neorhacodinae and Labeninae attack the nests of various bees, solitary wasps and social wasps. The cocoons of ichneumonids and braconids are attacked by a number of cryptines and a few pimplines, which thus act as pseudo-hyperparasites, some obligatorily. One subfamily, the Mesochorinae, comprises hyperparasites of other ichneumonids, braconids and tachinids (Diptera), with oviposition into the primary parasite larva whilst it is developing (usually internally) in (or on) the primary host. The Eucerotinae is another subfamily of specialised, obligatory hyperparasites; with an extraordinary life history involving egg-laying on the food plant of the host of the primary parasite. A few ichneumonids are cleptoparasites of other members of the family; the best known is probably Pseudorhyssa (Poemeniinae). A cremastine, *Temelucha interruptor*, is a facultative cleptoparasite of a braconid.

Larvae and pupae of beetles boring in wood and other plant tissue are attacked by a variety of biologically more primitive ichneumonids. Relatively few groups (often

only one or two genera in a subfamily) have exploited any of the many other Coleoptera available as potential hosts. The exception is the subfamily Tersilochinae, which parasitizes members of a wide range of beetle families. Comparatively small numbers of ichneumonids utilize Diptera as hosts, and those that do almost all belong to small, highly-specialised lineages (notably the Diplazontinae, Orthocentrinae, Cylloceriinae, Microleptinae and some groups of Cryptinae). Some Neuroptera and Mecoptera are parasitized by a few species of Cryptinae, Campopleginae and Labeninae. Trichoptera are attacked by Agriotypinae, which search for and develop on their hosts underwater, and a few Cryptinae.

Spiders succumb to ectoparasitic polysphinctines (Pimplinae), whilst their egg sacs are attacked by some other pimplines and by some cryptines. One genus of Cryptinae (*Obisiphaga*) parasitizes the egg nests of a pseudoscorpion.

Historical account

Alexander H. Haliday (1806-1870) was a meticulous entomologist from Co. Down in Northern Ireland. He made an enormous contribution to Irish Entomology (O'Connor, 1997) and his collection is preserved in the National Museum of Ireland (O'Connor and Nash, 1982). *Inter alia*, he worked on many groups of Hymenoptera including the Chalcidoidea, Ichneumonoidea, Platygastroidea and Proctotrupoidea (O'Connor, Nash and Achterberg, 1999; O'Connor, Nash and Bouček, 2000; O'Connor, Nash, Notton and Fergusson, 2004). In the Ichneumonidae, he made a very important contribution to our knowledge of the Irish fauna. Altogether, he decribed 45 species and 20 of these remain valid (Fitton, 1976).

William Frederick Johnson (1852-1934) was born in India. Subsequently he graduated from Trinity College Dublin and took holy orders. Like Haliday, he studied many groups and his work among the Irish insects will always stand out as a remarkable achievement (Anon., 1934). He was a careful and assiduous worker, sending dubiously identified ichneumons for verification to the Swede Per Abraham Roman. Between 1904 and 1931, he published 29 papers with new records and

PLATE 1. William Frederick Johnson (1852-1934).

observations. Many species were added to the Irish list.

Other notable workers were Claude Morley, Arthur W. Stelfox and Bryan P. Beirne. The first-named is best remembered for his contribution towards the Clare Island Survey. However, Irish ichneumonids are mentioned in another fourteen

publications including his volumes *Ichneumonologica Britannica*. Stelfox, who was employed as the entomologist in the National Museum of Ireland from 1920-1948, was one of the greatest collectors of Irish insects especially the Hymenoptera. Altogether, he published seventeen papers on the group in Ireland. B. P. Beirne studied the cephalic structures and the spiracles of the final instar larvae of the Ichneumonidae for which he was awarded a Ph.D. by Trinity College Dublin. This resulted in two important papers (Beirne, 1941a, b). Beirne's collection of microscope slides is in the Natural History Museum, London (Notton, 1995). Other important workers are cited in the references.

The present catalogue

Suprisingly, there is no previous Irish checklist for these important insects. The present catalogue provides the first comprehensive account of the Irish species, 222 of them being recorded here for the first time. Altogether, 1137 are now definitely known from the island.

This catalogue is the fourth and final one in a series (O'Connor, Nash and Achterberg, 1999; O'Connor, Nash and Bouček, 2000; O'Connor, Nash, Notton and Fergusson, 2004) which are contributions towards a checklist of the Irish Hymenoptera. In this context, the authors would be delighted to hear of any errors or omissions. Based mainly on the published literature, full data are given where available, including distributions, flight-periods and hosts. In some instances, it has been possible to give previous unpublished information gleaned from museum material when it was unavailable in the literature and these data are indicated by "(unpublished)". From specimens in NMI, it has been possible to include unpublished localities, dates of capture etc. Square brackets indicate species either removed from the Irish list, or misidentifications, while {} brackets are used for data taken from museum specimens which supplement published records. Nomenclature follows Yu and Horstmann (1997) and Schwarz and Shaw (1998, 1999). A total of 1137 species is definitely reported from Ireland, including 222 new to the fauna. This represents

approx 50 % of the number known from Britain (over 2000). Species new to the Irish fauna are indicated by an asterisk in the text. This is similar to the percentage for the Platygastroidea and Proctotrupoidea (over 52%) and higher that those of the Braconidae (44%) and Chalcidoidea (30%) (O'Connor, Nash and Achterberg, 1999; O'Connor, Nash and Bouček, 2000; O'Connor, Nash, Notton and Fergusson, 2004).

Checklists are provided for the twenty-nine subfamilies known from Ireland, and a very short description of each is given under the appropriate heading in the catalogue. However, for further information including taxonomic characters, keys and other literature, hosts and life histories, the reader should consult Gauld and Bolton (1988) and Noyes *et al*. (1999). Whenever possible, grid references for localities mentioned in the text are given in Table 1. In some instances, particularly for old records, these only indicate the general area of capture rather than a precise site. In a small number of cases, it was impossible to provide a grid reference and these are shown in italics. If authors have used vice-counties, these are cited. Nomenclature follows Yu and Horstmann (1997), Schwarz and Shaw (1998, 1999, 2000) and Shaw (2006).

Abbreviations used in the text

AAL - A. A. Lisney; AB - A. Beaumont; AGI - A. G. Irwin; AHH - A. H. Haliday; AMG - A. M. Gwynn; A. Roman - AR; BHN – B. H. Nelson; BPB - B. P. Beirne; CL - C. Langham; CM – C. Morley; CMD - C. M. Davies; COR - C. Ronayne; CR - C. Reid; EFB - E. F. Bullock; ESB - E. S. A. Baynes; GHC - G. H. Carpenter; GJK – G. J. Kerrich; GM- G. Mattison; GMS – G. M. Stelfox; HCGC - Helena Chesney; HCGC – H. C. G. Chesney, HD - H. Donisthorpe; HKT – H. K. Townes; HLO - H. L. Orr; HWA - H. W. Andrews; IDG - I. D. Gauld; IM- I. Mongomery; JFP - J. F. Perkins; JJK - J. J. F. X. King; JPB - J. P. Brock; JWY - J. W. Yerbury; KGB- K.G. Bond; KH – K. Horstmann; LHBW - L. H. B. Wyse; MGF - M. G. Fitton; MRB - M. R. Boston; MRS - M. R. Shaw; MWRG – M. W. E. de V. Graham; ND - National Museum of Ireland (abbreviation used by Jussila); NHF - N. H. Foster; NMI - National Museum of Ireland; NMV - National Museum of Victoria, Melbourne; PD – P. Duff; PEG - P.

E. Grimshaw; PJC- P. J. Chandler; RA - R. Anderson; RCF - R. C. Faris; RFS - R. F. Scharff; RGA - R. G. Atkinson; RN - R. Nash; RSM - Royal Scottish Museum; RT - Robert Thompson; RWC – R. W. Carlson; SC - S. Clowson; TD - T. Delaney; TG - T. Greer; UM - Ulster Museum; WFVK – W. F. de Vismes Kane.

TABLE 1. List of collecting sites.

ANTRIM: Antrim (town), Ballyharvey Road (J1783); Ballycastle (D1140); Ballygally Head (D3808); Ballymoney (C9726); Barnett's Park, Belfast (J3268); Belfast (J3268) (J3167)**;** Belfast (Botanic Gardens) (J3373); Belfast (Toughmonagh) (J3269); Breen (D1233); Bushfoot (C9342); Carr's Glen (J3178); Cave Hill (J3279); Dunmurry (J2968); Dunseverick (C9944); Garfield Street, Belfast (J3374); Giant's Causeway (C9545); Giant's Ring near Belfast; Glarryford Bog (D0512); Glenarm (D3115); Killead (J1579); Lisburn (Moira Road) (J2263); Magheramorne (Magheramore) (J4498); Massereene Park (J1485); Murlough Bay (D2041); New Forge, near Belfast (J3269); Portavo (J554825); Rea's Wood (J1485); Selshan (J0868); Shanes Castle (J0487); Whitepark Bay (D0143).

ARMAGH: Acton Glebe (Acton) (J0640); Aghalee (J1265); Armagh (H8745); Churchill (Church Hill) (H8960); Derryhubbert (H6090); Jerrettspass (J0633); Peatlands National Nature Reserve (H9061); Poyntzpass (J0639); Richhill (H9447); The Argory (H8758).

CARLOW: Bahana Wood (S7239); near Borris (S7250); Carriglead (S7242); Cloughristick (S7069); Fenagh (S7761); Kilcarry (S8962); Oak Park (S7379); Oak Park Teagasc farm (S7380); Thomastown (S5841).

CAVAN: Arva Road (H3501); Cornafean (N3499); Cuilcagh Lake (N6389); Eighter, Lough Ramor (N5786); Farnham (H3906)**;** Farrinseer (H3401); Killykeen (H3405); Long Hill, Cleggy (Cloggy) (N3499); Lough Gowna (N3091); Lough Mentis (H3500); Portlongfield (H3500); Sloan's Fort, Cornafean (N3499); Virginia (N5888).

CLARE: Ailladie (M0802); Ballynalackan (M1000); near Ballynalackan (M1001); *Burren*; Caher River (M1408)**;** Clooncoose (R2795); Corofin (R2689); Glenville,

Lahinch (R0985); Kilrush (Q9955); Lahinch (R0987); Poulsallagh (M0801); near Rathdorney River, Burren (M2105); near Spa, Lisdoonvarna (R1397); Lough Atorick (R6396); Moy House, Lahinch (R0886); Spanish Point (R0378).

CORK: Ballycotton Bay (W9865); Bantry (W0048); Castlemartyr (W9672); Corkbeg (W8263); Fota (W7871); Garnish Island, Glengarriff (V9356); Glandore (W2535); Glengarriff (V9356); Lodge Woods, Glengarriff (V9157); Monagurra Lough, Ballycotton Bay (W9765); Monkstown (W7665); River Blackwater near Youghal (X0981); Roches, Glengarriff (V9356); Ummera (W3672); Youghal (X1077).

DERRY: Ballykelly (C6222).

DONEGAL: Ards (C0534); Ards Forest Park (C0534); Bundoran (G8158); Carndonagh (C4745); Coolmore (G8666); Creeslough (C06300; Dungloe (B752096); Finner (G8461); Glebe House (C0617); Horn Head (C0142); Tramore Horn (Tramore, Horn Head,) near Dunfanahhy (B9836); Isle of Doagh (C4-5-); Kilmacrenan (C1420); Kilmacrenan (C1420); Lough Eske (G9684); Lough Trumman (G9472); Milford near Letterkenny (C1926); Muckish Quarry (C0028); New Lough, Dunfanaghy (C0036); Portnoo (G6999); Slieve League, Killybegs District (G5578); Tory Island (B8-4-); Tranarossan (C1142).

DOWN: Ballymacormick Point (J5283); Ballyroney (J2237); Ballyworkan near Portadown (J0151); Bangor, Stricklands Glen (J4981); Balleevy (J4515); *near Batt's Wood*; Belmont (J3874); Bohil Breagah (J396459); Cairnshill, Belfast (J355687); Carngaver (J4576); Castleward (J5749); Cultra (J4180); Curraghard beside Tollymore Forest (J3631); Dane's Wood, Clandeboye Estate (J4977); Darragh Island (J536599); Donaghadee (D'dee) (J5879); Donard Lodge (Lo) (J3629); Donard Lough (J3629); Donard Park (J331696); Down Cathedral (J48146); Drinnahilly (J3630); Dromore (R3487); Dundrum (J4036); Glastry (J6263); Greencastle (J2511); Groomsport (J541834); Holywood (J4079); Horse Island (J5960) ; Inch Abbey, River Quoile (J477455); Jane's Shore, Old Quoile Bridge (J4846); Kilkeen (J3975); Killard (J6045); Killysavin (J0738); Killough (J5336); Knocknagoney (J3976); Lenaderg

(J1149); Lighthouse Island (Copelands) (J579858); Lough Shark (J0641); Mountstewart (coast road) (J5470); Mourne Wood (J2712); Murlough House (J4034); Murlough National Nature Reserve (J4135, J4034, J4039); Newcastle (J3730); Newcastle, Donard demense (J3630); Newcastle, north slope of Drinnahilly (J3630); Newry (J0926); Newtownards (Newtonards) (J4973); River Quoile near Downpatrick (J4649); Rostrevor (J1818); Rostrevor, Killowen beach (J1815); Rostrevor, Victoria Square (J1818); Seaforde Estate (J4143); Six Road Ends (J5278); Sliddery Ford (J3934); Slieve na Maddy (Sl.- na Maddy) (Slievenamaddy) (J3529); Stormont (J3974); The White Bog near Killough (J5-3-); Tipperary Wood (J3730); Tollymore (J3532, J3233); Tollymore (J3331); Tollymore Forest Park (Park) (J3232); Tullybrannigan (J3531); Quoile Wood (J4846); River Quoile near Downpatrick (J4649); Warrenpoint (J1418).

DUBLIN: Ashtown, the Royal Canal (O1137); Balbriggan (O2063); Ballynascorney (O0722); Blackrock/Monkstown (O2228)**;** Bog of the Ring (O1860); Boher-na-breena (Bohernabreena) (O0-2-); Botanic Gardens (O1439)**;** Bushy Park (O1329); Castleknock (O0837); Chapelizod (O1034); Clondalkin (O0731)**;** Cot Brook (O1019); Dartry (O1630); Dollymount (O2136); Dublin (O1-3-); Firhouse (O1127); near Foxrock (O2125); Glenasmole (O1019); Gollierstown (O0132); Greenhills (O1029); Harold's Cross (O1432); Howth (O2-3-); Howth Castle (O2739); Ireland's Eye (O2841)**;** Jobstown (O0626); Johnstown (O2121); Kenure Park, Rush (O2655); Kilbarrack (O2439); west of Killeen(O0932); Killeen (O0932); Kiltalown (O0725); Kippure House (O0814); Lambay (Island) (O3150); Lynch Park (O0324); Lucan (O0335); Lucan, Sarsfield Estate (O0236); Lynch Park (O0324); Malahide (O2245); *Marlfield*; Mayfield, Harold's Cross (O1530); Monkstown (O2228); North Bull Island (O2-3-); Orlagh College, Rathfarnham (O1328); Phoenix Park (O0935); Portmarnock (O2441); Portrane (O2549); Raheny (O2238); Rockbrook (O1324); Rogerstown (O2452); Rush (O26540; Santry Demense (O1640); Saggart (O0326); Santry Demense (O1640); Seapoint (02229); Shankill (O2421); Skeagh House (N9729); Skerries, Dublin Road (O2459); Slade Brook, Glenasmole (O1019); Slade of Saggart

(O3-5-); St Anne's, Clontarf (O2137); St Columba's College (O1525); St Johns's Wood, Clondalkin (O0630); Sutton (O2539); The Dingle, Carrickmines (O2122); The Island (O2-4-); Upper Dodder (O0-2-); Upper Glenasmole (O0921); Verschoyle's Hill (O0424); Whitechurch (O1426).

FERMANAGH: *Carrickcreagh;* Castlecoole, Bendrum Lough (H2543); near Clareview (H1760); Marble Arch (H1234); Cuilcagh Mountain (H0929); Enniskillen (H2684); Glenasheevar (H047535); Marble Arch (H1234); Summer Hill (Summerfield) (H4828); Tempo (H3548); Tempo Manor (H3548).

GALWAY: Bencorr （L8052); Clonbur (M0955); *Connemara*; *Craigamore Lough*; Diamond Hill, Letterfrack (L7257); Eyrecourt (M9016); Furnace (Foirnis) Island, Lettermullan (L8324); Galway (M2925); Garryland Wood (R4203); Kilchrest (M5614); Kylemore (L7559); Legalough (H0834); Portumna (M8505); Rosleague House, Letterfrack (L6857); Ross (M1737); Roundstone (L6938); Woodford (M7300).

KERRY: Ardagh, Killarney (V9887); Ballast, Killarney (V9691); Blackstones (V7086); Caragh Lake (V7-8-; V7-9-); Cloghereen, Muckross, Killarney (V9886); Cloonee (V8164); Coumloughra (Coomloughra) Reeks (V7885); Cromaglaun (Cromaglan) (V9281); Derrycunnihy (V9080); Derrynane (Darrynane) (V5458); Dingle (Q4400); Dunkerron (V8970); near Fermoyle (Q5412); Flesk, Killarney (V9688); Gap of Dunloe (V8785); Glenbeigh (V6691); Glencar (V7087); Kenmare (V9171); Kenmare Estate, Killarney (V9490); Killarney (V9-9-); Killarney District, near the Gap (V8788); Lake Side, Killarney (V9686); Loo Bridge (W0881); Mangerton (Mountain) (V9781); Muckross (V9787); Parknasilla (V7164); Rossbeigh (V6491); Slaheny Valley (W0172)**;** Tomies Wood, Killarney (V9188); Torc Stream, Killarney (V9684); Valentia Island (V3-7-); Waterville (V5066); Woodlawn, Killarney (V9689).

KILDARE: Arthurstown (N9520); Athgarret (Athgarrett) (N9416); Athy (S6893); Brockagh (N7826); Carton (N9638); Clongoweswood (Clongowes Wood College) (N8729); Cupidstown (Cupidst'n) Hill (O0020); Glending (N9615); Grand Canal

(N9326); Kilkea Park (S7488); Landenstown (N8524); Louisa Bridge (N9936); Maynooth (N9437); Morristownbiller (N7715); Mouds Bog (N7715); south of Naas (N8919); Newbarry (Newbury) (N6934); Newbridge Fen (N7715); Oldtown House (N9533); Royal Canal (O0035); Rye Water (O0036); Sallins (N8922); Sherlockstown (N9024); Skerries Bog (S7299).

KILKENNY: Graignamanagh (S7043); Kilkenny (S5056); Mullinavat (S5623); railway and quarry near railway junction south of Kilkenny (S5454).

LAOIS: Abbeyleix (S4384); Derry Hills (N2612); Emo (Park) (N5208); Mountrath (S3594); north of Emo Park (N5507); Portarlington (N5413); Portlaoise (S4798); The Derries (N5805); Woodbrook (N5109).

LEITRIM: Bundrowse(s) (G7958); Shriff, Lough Gill (G7934); Tullaghan (G7857).

LIMERICK: Cool Beg, Kilteely (R7241); Limerick (R5757); Lyracappul (R8423).

LONDONDERRY: Creevedonnell (C4409); Roe Estuary (C6629)

LONGFORD: Castle Forbes (N0980); *Sixtowns*.

LOUTH: Ballymascanlan (J0710); Bellurgan (J0909); Carlingford (J1811); Blackhall near Clogher Head (O1282); Dundalk (J0407); Edentubber (Edentober) (J0718); Essexford (H8903); Omeath (J1416); Termonfeckin (O1480).

MAYO: Achill Island (F6-0-); Achill Sound (L7399); north-east Achill (F7-0-); Belclare (L9782); Brackloon Wood, Westport (L9779); Carrowmore Hill (L7980); Carrowmore Lough (F8130); Castlebar (M1589); Clare Island (L6-8-); Croaghpatrick (L9080); Curraun (Corraun) (L7293); Darby's Point (L7293); Dooaghtry (L7469); Killadangan (Killdangan) (L9482); Knappagh near Westport (L9880); Knappagh (L9880); Knappagh Wood (Brackloon) (L9780); Lough Namucka (L8275); Louisburgh (L8080); Mount Brown Lough; Mulranny (L7399); Old Head (Woods) (L8382); Polranny (F7600); Portlea, Clare Island (L7086); Sraheen's Lough (F7100); The Mullet (F6933); Westport (L9984).

MEATH: Agher (N8146); Ferns Lock (N8641); Rahinstown (N8046); near Summerhill (N8348); Thomastown Bog (O0068)**.**

MONAGHAN: Scotstown (H6036).

OFFALY: Charleville (N3122); Mongan Bog (N0330).

ROSCOMMON: Castlerea (M6681); Mote Park (M8961).

SLIGO: Ballymote (G6615); Carrowgarry (G2827); Classibaun (Classiebawn) Wood (G70576); Kesh (G7210); Rosses Point (G6340); Streedagh (G6349); Toberscanavan (G6823); Trawallua (Trawalua) (G6-5-); Tullaghan (G7857).

TIPPERARY: Aherlow (R9332); Ballinacourty (R8529); Ballinacourty House, Glen of Aherlow (R8529); *Clady River*; Clonmel (S2022); Galtymore (R8823); Greenfield House (R8945); Lough Boreen, Galtees (R8924); Lough Curra (R8724); Lough Diheen (R8824); Mount Butler (S1789).

TYRONE: Altmore Burn (H7165); Baronscourt (H3682); near Cookstown (H8077); Drumagullion (H8470); Gortin Glen (H4881); near Moy (H5783); Knockmany Forest (H5455); Moy (H8356).

WATERFORD: Cappoquin (X1099); Clonea (X3194); Dungarvan (X2593); Dunmore East (S6800); Kilgreany, Dungarvan (X1794); Lismore (X0498); Maghgiha (Wood), Dungarvan (X2-9-); Stradbally (X3798); Tramore (S5901).

WESTMEATH: Ballyhealy (N6260); Ballynafid (Lake) (N4060); Glenlough (Glen Lough) (N2866); Killucan (N5651); Lough Owel (N4-5-); Lough Slevin (Slevin's Lake) (N4556); Newtownlow (N3736); Riverdale (N6151).

WEXFORD: Ballyhighland (S8840); Ballyteige (S9305) (S9504); Cahore (T2247); Clone (T0047); near Coolgreany (T1869); Courtown (T1956); Curracloe (Curraghcloe) (T1-2-); Duffcarrick, Courtown (T2058); Enniscorthy (S9739); Forth Hill (S9718); Great Saltee Island (X9497); Kilgorman (T2363); Killoughrim (S8941); Killurin (S9626); Kilmore (S9906); Kiltrea Bridge (S9240); Mount Garrett Wood (S7230); Great Saltee Island (X9596); The Raven (T1123).

WICKLOW: Altidore (O2408); Arklow district (T2-7-); Askintinny (T2569); Athdown (O0715); Avoca (T2079); Avondale (T1986); Ballinacor (T1387); Ballinclea (S9595); Ballyarthur (T1977); Ballyhenry (O2800); Ballylusk, near Ashford (T2495); Ballyhubbock (S9193); Ballylusk (T2495); Ballyneddin (Ballyneddan) (T0090); Baltinglass (S8688); Bellevue (O2711); Blessington

(N9814); Bray Head (O2817); Brittas Bay (T3082); Broad Lough, The Murrough (T3096); Buckroney (T2979); Calary(O2311); Castle Howard (T1983); Clara (T1792); Coan (S9892); Coolattin Park (T0169); Cloughleagh (O0416); Connary (T2083); *Cronyburn*; Deputy's Pass (T2390); Devil's Glen (T2499) (The Devil's Glen); Dowry (O0318); Dromgoff Brook (T1090); Drumdangan Glenealy (T2290); Dunran (O2601); Enniskerry (O2417); George's Bridge (S9093); Glen of Imaal (S9693); Glencree (O1417); Glendalough (T1196); Glending (N9615); Glending Wood (N9615); Glenealy (T2492); Glenmacnass (O1-0-); Glenmalure (Glenmalur) (T0-9-); Glenmore Castle (T2498); Gold Mines Valley (T1675); Golden Hill (O0116); Greystones (O2912); Holdenstown Bog; Hollywood; Imaal, Leitrim (S9693); Kilcoole (Kilcool) (O2907); Killegar (O2119); Kilmacanoge near Bray (O2514); Killoughter (T2999); King's River (O0-1-); Kippure House (O0814); west of Knickeen (S9894); north of Knockananna (T0181); near the source of the River Liffey (O1413); Leitrim Barracks (S9693); Liffey Head (O1313); Lough Dan (O1502); Lough Nahanigan (T0799); Lough Ouler (O0902); Lugnaquilla (T0392); Magherabeg (T3188); Manor Kilbride (O2717); Meeting of the Waters below Rathdrum (T1883); Monagloch (T1975); Murrough (T3096)**;** Newcastle, The Murrough (O3103); North Prison on Lugnaquilla (T0391); Ow Valley (T0389); Powerscourt (O2116); Powerscourt Deerpark (O2012); Powerscourt Demense (O2116); Prince William's Seat (O1718); Rathdrum (T1888); Russellstown (N9610); Seefin (O0716); The Meeting of the Waters (T1983); The Murrough (O3105); The Quill near Kilmacanogue (O2413); Tonlagee (Tonelagee) Mountain (O0801); *Tullyhenry*; Woodend (O0114); Woodstock (O2906).

FIGURE 1. The counties of Ireland.

ADELOGNATHINAE

The Adelognathinae comprises the single genus *Adelognathus*, which is Holarctic in distribution and includes about 45 named species. Adelognathines are generally poorly represented in collections although they occur regularly in samples from Malaise traps. Seventeen species are found in the British Isles.

It is probable that all species develop only as ectoparasites of well-grown sawfly (Hymenoptera) larvae. Gregarious parasitism has been most often observed, but at least one species seems to be solitary. The host larvae range from exposed to fully-concealed feeders, of the families Pamphiliidae and Tenthredinidae, on trees and bushes.

The broad obovoid eggs are firmly stuck by their flat bases in central dorsal positions on the abdominal segments of the host. In gregarious species the eggs are grouped and hosts bearing them are fully mobile and fit to feed. Hatching takes place within a few hours of laying and larval development is extremely rapid. The larva remains anchored by its posterior end to the collapsed egg shell until feeding is nearly completed. In some cases the host larva continues to feed until overwhelmed by the well-grown parasite larva. The rapid development may help reduce the vulnerability of these ectoparasites. The full-grown larvae leave the host and spin cocoons in cavities in ground debris or within the host retreat, if the host is a species that has one. All are thought to overwinter in the cocoon probably as a final instar larva. The summer cocoons of bivoltine species are relatively frail and pale brown while the overwintering cocoons are stout and dark brown. The adult chews an emergence hole at one side well below the apex.

Adelognathus brevicornis Holmgren, 1857

ANTRIM: Rea's Wood, ♀ 5-11 June 1985, Malaise trap, MRB and RN (UM) (det. MRB); CARLOW: Bahana Wood, ♂ 9 June 1935, AWS (NMI) (det. IDG); KILDARE: Oldtown House, ♂ 4 June 1953, AWS (NMI) (det. IDG); WICKLOW: Castle Howard, ♀ 30 July 1947, AWS (NMI) (det. IDG) (all unpublished).

Ireland (Fitton *et al*., 1982: p. 280 Cork to Donegal).

***Adelognathus chrysopygus* (Gravenhorst, 1829)**

synonym *Adelognathus granulatus* Perkins, 1943

DOWN: no locality {Donard Lodge, ♂ 4 July 1965, AWS (NMI) (det. AWS as *Adelognathus granulatus* and conf. IDG)}; Stormont, ♀ 15 August 1973, garage window AGI (UM) (det. as *pallipes* by MRB and confirmed MGF, det. as cf. *pallipes* by JPB, det. as *chrysopygus* by DK); DUBLIN: no locality {Glenasmole, 29 June 1928, AWS (NMI) (det. IDG as *Adelognathus granulatus*)}; Monkstown, ♀ (paratype), bred from sawfly larva No. 34, G. E. Scott (Perkins, 1943: p. 112 as *Adelognathus granulatus*); TYRONE: Moy, ♀ 29 July-4 August 1985, Malaise trap, MRB and RN (UM) (det. MRB and RN), ♀ 26 August-1 September, previously determined as *granulatus*; WEXFORD: no locality (all Fitton *et al*., 1982: p. 282 as *Adelognathus granulatus*).

***Adelognathus dorsalis* (Gravenhorst, 1829)**

synonym *Stilpnus dryadum* Curtis misidentification

ANTRIM: Rea's Wood, ♂♂♀♀ 6-9 July 1985 and 19-23 July 1985, Malaise trap, MRB and RN (UM) (det. MRB) (unpublished); DUBLIN: no locality, AWS (Stelfox, 1952: p. 37); GALWAY: no locality, ♂♂♀♀ types (lectotype ♀, paralectotypes ♂♀), on oak *Quercus* trees, AHH (NMI) (Curtis, 1832: 388; Morley, 1907a: p. 243 as *Stilpnus dryadum*; Fitton, 1976: p. 324 as *Stilpnus dryadum*); KILDARE: no locality, {R. Canal, ♂ 15 and 29 August 1943, (NMI) (det. IDG)} AWS; LONGFORD: no locality, {Castle Forbes, ♀ 30 July 1938 (NMI) (det. AWS and conf. IDG)}, AWS; SLIGO: no locality, {Streedagh, 1 August 1938 (NMI) (det. AWS and JFP, conf. IDG)}, AWS; TIPPERARY (South): no locality, AWS; WICKLOW: no locality, {Blessington, 15 June 1941 (NMI) (det. IDG); Broad Lough, The Murrough, ♂ 11 June 1953 (NMI) (det. AWS and conf. IDG)}, AWS (Stelfox, 1952: p. 37 4♂♂13♀♀ from June 15th, through July and August, up to September 15th. ♂♀ confirmed by J. F. Perkins).

Ireland (Fitton *et al.*, 1982: p. 279; Jussila, 1987: p. 6 as *Stilpnus dryadum*; same reference: p. 15 under incorrectly referred to *Stilpnus*. Paralectotype ♀: Ireland, Galway (designated by M. G. Fitton 1976) belongs to the genus *Atractodes* Grav. The other specimens are correctly determined).

***Adelognathus laevicollis* Thomson, 1833**

CORK: no locality; DUBLIN: no locality {Saggart, ♀ 20 June 1943, AWS (NMI) (det. IDG)}; WICKLOW: no locality {Clara, ♂ 1 June 1937, AWS (NMI) (det. AWS and conf. IDG)} (all Fitton *et al*., 1982: p. 280).

***Adelognathus nigrifrons* Holmgren, 1857**

WICKLOW: no locality {Glending Wood (Wd), ♂ 25 June 1944, AWS (NMI) (det. AWS and conf. IDG)} (Fitton *et al*., 1982: p. 280).

***Adelognathus pallipes* (Gravenhorst, 1829)**

CAVAN: no locality; KILDARE: no locality {Skerries Bog, ♀ 19 September 1946, AWS (NMI) (det. IDG)}; MEATH: no locality (all Fitton *et al*., 1982: p. 282); TYRONE: Moy ♀♀ 12-18 August 1985, Malaise trap, also ♀ 9 August 1983, laurel *Prunus laurocerasus*, MRB (UM) (unpublished); WICKLOW: no locality {Glenmalur, ♂ 30 May 1940, AWS (NMI) (det. IDG)} (all Fitton *et al*., 1982: p. 282).

***Adelognathus punctulatus* Thomson, 1833**

Synonym *Adelognathus chrysopygus* misidentification

WEXFORD: no locality; WICKLOW: no locality {Woodstock, ♀ 30 August 1952, AWS (NMI) (det. IDG)} (both Fitton *et al*., 1982: p. 280 as *chrysopygus* misidentification).

***Adelognathus pusillus* Holmgren, 1855**

SLIGO: no locality; WICKLOW: no locality {Devil's Glen, ♀ 29 September 1954, AWS (NMI) (det. IDG)} (both Fitton *et al*., 1982: p. 282).

***Adelognathus stelfoxi* Fitton, Gauld and Shaw, 1982**

DOWN: Newcastle, holotype ♀ 8 September 1955, AWS (USNM); DUBLIN: Cot Brook, paratype ♀ 7 July 1950, AWS (USNM) {now NMI}; WICKLOW: Athdown,

paratype ♀ 9 September 1945, AWS (USNM); Dowry, paratype ♀ 26 September 1953, AWS (BMNH) (all Fitton *et al*., 1982: pp 280, 282).

Ireland (Fitton *et al*., 1982: p. 278; Jussila, 1991: p. 37).

***Adelognathus tetratinctorius* (Thunberg, 1824)**

synonym *Adelognathus fasciatus* Thomson, 1883

DUBLIN: no locality {Lucan, 16 June 1948, AWS (NMI) (det. IDG)} (Fitton *et al*., 1982: p. 280 as *Adelognathus fasciatus*); WICKLOW: Athdown, ♀ 25 July 1943, AWS, det. JFP (Stelfox, 1951: p. 236 as *Adelognathus fasciatus*); no locality (Fitton *et al*., 19882: p. 280 as *Adelognathus fasciatus*).

***Adelognathus thomsoni* Schmiedeknecht, 1911**

KILDARE: no locality (Fitton *et al*., 1982: p. 279).

ALOMYINAE

This subfamily comprises the ten-or-so species included in the aberrant genera *Alomya* and *Megalomya*. Some authors argue that the group belongs within the tribe Phaeogenini (then taking the name Alomyini) in the Ichneumoninae. Two species of *Alomya* occur in the British Isles.

The hosts of *Alomya* are ghost moths (Lepidoptera: Hepialidae). Males of *Alomya* are often common and conspicuous, resting on the flowers of umbellifers or flying over low vegetation. Females are much more rarely seen, spending most of the time at soil level searching for hosts. The female *A. semiflava* enters the tunnel of the final instar larva of its host *Hepialus lupulinus* (Linnaeus), approaching from the front and bringing forward her metasoma, between her legs, oviposits into the host, below and just behind its mouthparts. Females sometimes lose their antennae in these encounters with a host larva. The host larva is eventually mummified and the parasite pupates within the mummy.

***Alomya debellator* (Fabricius, 1775)**

ANTRIM: Belfast, Barnett's Park, ♂ 16 May 1975 AGI (UM) (det. MRB); Giant's

Causeway, ♀ 6 June 1985 MRB and RN (UM); Rea's Wood, 3♂♂, 22 May 1985 and 4 June 1985, Malaise trap, MRB and RN (UM) (all unpublished); Killead, August 1923 including var. *semiflava*, WFJ (NMI) (Johnson, 1927: p. 159 as *Alomyia*, ♂♀); Rathlin Island, ♂ (UM) (det. MRB and RN) (unpublished); ARMAGH: Acton Glebe, Poyntzpass, 29 August 1904, WFJ (Johnson, 1904a: p. 256 as *Alomyia*; Johnson, 1904b: p. 262 as *Alomyia*); Poyntzpass, May and July, on flowers at roadside, WFJ (NMI) (Johnson, 1913: p. 139 var. *nigra* Gravenhorst); CORK: Castlemartyr, ♂ August 1976, glade in mixed conifer/deciduous woodland, RA (UM) (det. MRB and RN) (unpublished); DONEGAL: Portnoo sandhills and cliff, June, WFJ (Johnson, 1920a: p. 8 as *Alomyia*); DOWN: Cultra, 2♂♂ 7 June 1985, swept, MRB and RN (UM) (det. MRB and RN) (unpublished); Dundrum, June and August 1926 (including var. *nigra*), WFJ (NMI); Glastry, ♂ 30 July 1985, hogweed *Heracleum*, MRB and RN (UM) (unpublished); Rostrevor, {5} September 1923, WFJ (NMI); Warrenpoint, ♂ 18 August, WFJ (Johnson, 1929: p. 136 as *Alomyia*, Var. *nigra*); Rostrevor, ♂ 19 June 1973, oak *Quercus* woodland, AGI (UM) (det. MRB and RN); Rostrevor, ♀ 31 May 1975, oak *Quercus* woodland, RN (UM) (det. MRB and RN); Quoile, ♀ 15 August 1973, marsh, CR (UM); FERMANAGH: Marble Arch, ♂ 3 July 1985, MRB and RN (UM) (det. MRB and RN) (all unpublished); LOUTH: Carlingford, {6} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Alomyia*, type (i.e. typical) and var. *nigra* Gravenhorst); Dundalk, ♀ 12 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Alomyia*); Termonfeckin, August 1924, WFJ (NMI) (all Johnson, 1927: p. 159 as *Alomyia*, ♂♀); MAYO: Carrowmore Lough {Louisburgh}, ♂ {July} 1910, on wild carrot *Daucus carota* flower, CM (NMI); Clare Island, ♂♂ June 1911, WFJ (NMI); Westport, July 1911, JNH (Morley, 1911a: p. 10 as *Alomyia*); WATERFORD: Stradbally, ♀ 27-30 June 1908, HWA (Morley, 1908b: p. 276 as *Alomyia*); WICKLOW: Athdown, ♀ 30 June 1929, AWS (NMI) (det. AWS) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

ANOMALONINAE

This is a moderately large subfamily with over 700 species world-wide in distribution and occuring in most types of habitat. The 39 British Isles species are mainly inconspicuous, although not as rare as was once supposed.

Some members of the small tribe Anomalonini are known to parasitize the larvae of tenebrionid beetles, but as far as is known all Gravenhorstiini attack larval Lepidoptera and the recorded host range is wide, both in terms of host taxonomy and size.

Anomalonines are solitary, koinobiont endoparasites, with oviposition into an early instar larval host. Adult emergence is invariably from the host pupa. Females searching for hosts have a characteristic flight pattern, hovering and making gentle up-and-down movements close to the vegetation. The egg is placed in the haemocoel of the host, attached to an internal organ or to the body wall by means of a small holdfast. The first instar larva is reported as remaining enclosed within a membrane of embryonic origin, a trophamnion. A trophamnion is not known to occur in any other subfamily of ichneumonids. The first larval instar is the usual overwintering stage. The fully-grown larva spins only a flimsy cocoon within the host pupal shell and the adult parasite escapes by biting a roughly circular hole at the anterior end.

Gravenhorstiini

***Agrypon anxium* (Wesmael, 1849)**

CORK: River Blackwater near Youghal, ♂ August 1976, undercover in beech *Betula*/ash *Fraxinus* forest, RA (UM) (det. MRB and RN); DOWN: Donard Lodge, ♂ 25 July 1965 and ♂ 8 August 1965, AWS (NMI) (det. MB); Murlough NNR, ♀ September 1984, moth trap, BHN (UM) (det. MRB and RN); Rostrevor, ♂ 14 July 1926, WFJ (NMI) (det. MB); DUBLIN: Bohernabreena, emerged 26 September 1982, emerged from peach blossom *Thyatira batis* (L.) (Lepidoptera: Drepanidae) caterpillar on bramble *Rubus*, N. Cunningham (NMI) (det. MRB); WEXFORD: Kiltrea Bridge, ♀ 5 August 1929, AWS (NMI) (det. MRB); WICKLOW: Coolattin Park, ♀♀ 14 September .1984, swept in oak *Quercus* woodland, JPOC (NMI) (det. MRB)

(O'Connor *et al*., 2003: pp 312-313).

***Agrypon batis* (Wesmael, 1849)** **New to Ireland**

CARLOW: Kilcarry, ♂ 6 August 1929, AWS (BMNH) (det. H. Schnee).

***Agrypon clandestinum* (Gravenhorst, 1829)**

DUBLIN: Mayfield, Rathgar, ♀ 17 July 1923, AWS (NMI) (det. AWS and conf. MRB) (O'Connor *et al*., 2003: p. 313).

***Agrypon flaveolatum* (Gravenhorst, 1807)**

ANTRIM: Rea's Wood, ♀ 30 May-2 June 1985 deciduous woodland, RN and MRB (UM) (det. MRB); ARMAGH: Poyntzpass, ♂♂♀ 24 May 1920, field, WFJ (NMI) (det. MRB); CAVAN: Virginia, ♂ 30 May 1982, swept in alder *Alnus* fen, JMOC (NMI) (det. MRB); CLARE: near Ballynalackan, ♀ 31 May 1984, swept in scrub on limestone pavement, JPOC (NMI) (det. MRB); DOWN: Bohil Breagah, ♂, on ivy *Hedera* in vicinity of holly blue *Celastrina argiolus britanna* Verity (Lepidoptera: Lycaenidae)), RA (UM) (all unpublished); Rostrevor, ♀ 31 May 1929, woods, WFJ (NMI) (conf. MRB) (Johnson, 1930: p. 157); Stormont, ♂ 30 May 1969, field; FERMANAGH: Cuilagh Mountain, 2♀♀ 15 May 1983 and 8 June 1983, MRB and RN (UM); KILDARE: Landenstown, ♀ 25 May 1953, AWS (NMI) (conf. MRB); TYRONE: Knockmany Forest, ♀ 15 May 1983, MRB (UM) (all unpublished) .

***Agrypon flexorium* (Thunberg, 1824)**

synonym *Agrypon tenuicorne* (Gravenhorst, 1829)

CLARE: Ailladie, ♀ 1 June 1984, JMOC (NMI) (det. MRB); LAOIS: Woodbrook, ♂ 6 August 1950 and ♀ 13 August 1950, AWS (NMI) (det. MRB); WATERFORD: Maghgiha, Dungarvan, ♂ 17 August 1928, AWS (NMI) (det. AWS as *Agrypon tenuicornis*, conf. MRB) (O'Connor *et al*., 2003: p. 313).

***Agrypon varitarsum* (Wesmael, 1849)**

WICKLOW: Deputy's Pass, ♂ 19 July 1929, AWS (NMI) (det. AWS and conf. MRB) (O'Connor *et al*., 2003: p. 313).

***Aphanistes ruficornis* (Gravenhorst, 1829)**

CORK: Glandore, ♂ June 1900, JNH (NMI) (conf. MRB) (Morley, 1911c: p. 20; Anon., 1913: p. 43).

***Barylypa propugnator* (Förster, 1855)**

synonym *Barylypa insidiator* (Förster, 1878)

DOWN: Murlough NNR (Railway line), ♂ 2 August 1984, MRB (UM) (det. MRB and RN as *Barylypa insidiator*); Seaforde Estate, ♂ 12 September 1989, MRB (UM) (all unpublished); OFFALY: Mongan Bog, ♂ 5 June 1983, many in flight over heather *Calluna*, raised bog, J. Good (NMI) (det. MRB) (O'Connor *et al*., 2003: p. 313 as *Barylypa insidiator*).

***Erigorgus cerinops* (Gravenhorst, 1829)**

[ARMAGH: Armagh, emerged 6 May 1895, WFJ, det. CM (Johnson, 1904a: p. 256 as *Anomalon* ?*cerinops*; Johnson, 1904b: p. 262 as *Anomalon* ?*cerinops*); DONEGAL: Coolmore, ♀ September, flying over a low bank at the roadside, WFJ (Johnson, 1916a: p. 21 as *Anomalon*); Kilmacrenan, July 1916, WFJ (Johnson, 1917a: p. 40 as *Anomalon*); Portnoo, September, among sallows *Salix*, WFJ (Johnson, 1919a: p. 37 as *Anomalon*); KERRY: Loo Bridge, ♀ 28 July 1908, HWA (Morley, 1908b: p. 276 as *Anomalon*); Muckross, June, LHBW (Johnson, 1914a: p. 67 as *Anomalon*); LOUTH: Termonfeckin, ♀ August 1924, WFJ (Johnson, 1927: p. 161 as *Anomalon*); MAYO: Clare Island, ♀ September 1910, WFJ (Morley, 1911a: p. 14 as *Anomalon*); WEXFORD: Kilmore, middle of August 1898, AB (Morley, 1915: p. 242 as *Anomalon*).

***Erigorgus latro* (Schrank, 1781)**

DONEGAL: Portnoo, September, among sallows *Salix*, WFJ (Johnson, 1919a: p. 37 as *Anomalon*).

***Habronyx* (*Camposcopus*) *nigricornis* (Wesmael, 1849)**

DOWN: Newcastle, ♀ 29 September {1927}, WFJ (NMI) (conf. MMB) (Johnson, 1929: p. 137 as *Labrorhynchus*); WATERFORD: Cappoquin, August, JJK (Johnson, 1917a: p. 40 as *Labrorhynchus*).

***Heteropelma amictum* (Fabricius, 1775)**

synonym *Aphanistes xanthopus* (Schrank, 1781)

synonym *Heteropelma capitatum* (Desvignes, 1856)

CORK: Bantry, T. B. Fletcher (Morley, 1915: p. 227 as *Schizoloma*); Fola Forest Park, ♀ 6 September 1986, KGB (UM); Monkstown, ♂ August 1931, MSDW (NMI) (det. MRB) (both unpublished); DONEGAL: Kilmacrenan, July 1916, WFJ (Johnson, 1917a: p. 40 as *Schizoloma*); Portnoo, ♂♂♀ 5 June 1918, WFJ (NMI) (det. MRB as *Aphanistes xanthopus*); DOWN: Murlough NNR, ♀ 5 July 1984, BHN (UM) (det. MRB); Tollymore, ♀ 21 August 1984, mixed deciduous woodland, MRB and RN (UM) (det. MRB and RN); Mountstewart, ♀ 14 September 1973, PD (UM) (det. MRB); DUBLIN: Shankill, ♂ emerged 1 June 1927, AAL (NMI) (det. MRB as *Aphanistes xanthopus*) (all unpublished); KERRY: Valentia Island, ♀ 7 August 1901, JWY (Morley, 1902: p. 55 as *Schizoloma*; Morley, 1915: p. 228 as *Schizoloma*); KILDARE: Rye Water, ♀ 9 August 1981, JMOC (NMI) (det. MRB) (unpublished); MAYO: Knappagh near Westport, {June} 1911, JNH and PEG (NMI) (Morley, 1911a: p. 14 as *Schizoloma*).

***Heteropelma megarthrum* (Ratzeburg, 1848)**

synonym *Heteropelma calcator* (Wesmael, 1849)

WICKLOW: Deputy's Pass, ♀ 31 July 1929, AWS (NMI) (det. AWS as *Heteropelma calcator*) (O'Connor *et al*., 2003: p. 313).

***Therion circumflexum* (Linnaeus, 1758)**

synonym *Therion brevicorne* (Gravenhorst, 1829)

KILDARE: Athy, ?ex the miller *Leporina* (now *Acronicta leporina* (L.) (Lepidoptera: Noctuidae)) received 29 July 1941, K. M. Dunlop (NMI) (det. MRB) (O'Connor *et al*., 2003: p. 314 as *Therion brevicorne*).

BANCHINAE

The Banchinae is a moderately large subfamily with about 1,500 described species.

All of the three currently recognized tribes, Banchini, Glyptini and Atrophini (also known as Lissonotini), are world-wide in distribution and some of the individual genera, notably *Glypta* and *Lissonota*, are very large. The British Isles fauna comprises over 110 species representing 11 genera.

All Banchinae develop as koinobiont endoparasites of Lepidoptera larvae. Oviposition is usually into a young larva but the host is not killed until it is fully-grown and has reached the prepupal stage. Banchines develop as solitary parasites, with the one known exception of a gregarious species of *Lissonota*.

The host range of the Glyptini, is restricted more or less to the Tortricoidea. Tortricoid caterpillars usually live partially concealed in leaf rolls and similar shelters. The hosts of the Atrophini comprise a wide range of mainly small Lepidoptera. Species of *Lissonota* have long ovipositors which allow them to reach concealed hosts, including wood borers, such as the goat moth *Cossus cossus* (Linnaeus) which is attacked by the particularly large species *L. setosus*. Some genera of Atrophini and the Banchini have short ovipositors and attack exposed larvae of a variety of lepidopterous groups.

All of the reliable host records for the genus *Banchus* relate to species of Noctuidae. The larvae normally develop as solitary internal parasites and it is usually suggested that oviposition is into an early instar host larva. The fully-grown *Banchus* larva kills and leaves the host larva after it has left its foodplant and entered the soil to pupate. Cocoons of *Banchus* are elongate-ovoid, the silk dense and almost black. The adult emerges through a hole cut next to one end. Most species of *Banchus* probably are univoltine and overwinter as a fully-grown larva within the cocoon. Adults are on the wing for some period during late spring or early summer. A few of the species have flight periods in very early spring and these probably pass the winter as adults, or possibly pharate adults, within the cocoon.

Atrophini

***Alloplasta piceator* (Thunberg, 1822)** **New to Ireland**

synonym *Alloplasta murina* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, ♀♀ 2 and 3 June 1909, WFJ (NMI) (det. CM); DUBLIN: Upper Glenasmole, ♀ 15 June 1927, AWS (NMI) (det. AWS as *Alloplasta murinus*); KERRY: Mangerton, ♀ June 1905, JNH (NMI) (det. CM as *Meniscus murinus*); WICKLOW: Devil's Glen, ♀ 23 June 1929, AWS (NMI) (det. AWS as *Alloplasta murinus*).

***Cryptopimpla caligata* (Gravenhorst, 1829)**

DOWN: Holywood, AHH (NMI) (Morley, 1908a: p. 255 as *Lampronota*. Not uncommon); Newcastle, August, on sandhills, WFJ (Johnson, 1913: p. 140 as *Lampronota*); same locality, ♂ 27 August, WFJ (Johnson, 1929: p. 136 as *Lampronota*); WICKLOW: Rathdrum, ♂♀ 6 August 1925, AWS (NMI) (det. AWS as *Xenacis*) (unpublished).

***Cryptopimpla errabunda* (Gravenhorst, 1829)**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota*); ARMAGH: Poyntzpass, {21} August {1915}, at angelica *Angelica*, WFJ (NMI) (Johnson, 1916a: p. 20 as *Lissonota*); same locality, July, field, WFJ (Johnson, 1919a: p. 36 as *Lissonota*); DONEGAL: Coolmore, {30} August 1912, {2} September {1915}, at flowers of wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1914a: p. 66 as *Lissonota*; Johnson, 1916a: p. 20); DOWN: Rostrevor, ♀ 23 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Lissonota*); MAYO: Mulranny, ♀ July 1910, PEG (Morley, 1911a: p. 12 as *Lissonota*).

***Lissonota* (*Lissonota*) *accusator* (Fabricius, 1793)** **New to Ireland**

synonym *Lissonota segmentator* misidentification

WICKLOW: Woodend Brook, 28 May 1956, AWS (NMI) (as *segmentator*).

***Lissonota* (*Lissonota*) *anomala* Holmgren, 1860**

DUBLIN: Glenasmole, ♂♂ 5 May, at 1000 to 1200ft, AWS; WICKLOW: Gold Mines Valley, oak *Quercus* wood with much hazel *Corylus*, holly *Ilex* etc, ♂♂♀♀ 25 March, not uncommon, AWS (both Stelfox, 1932: p. 77 as *Cryptopimpla*).

***Lissonota* (*Lissonota*) *biguttata* Holmgren, 1860**

synonym *Lissonota femorata* Holmgren, 1860

ARMAGH: Poyntzpass, {21} July {1917}, WFJ (NMI) (Johnson, 1913: p. 140 as *Lissonota femorata*); DOWN: Rostrevor, ♀ 19 July 1930, in house, Mrs Johnson (NMI) (Johnson. 1931: p. 54 as *Lissonota femorator*); same locality, ♀ 1 August 1931, WFJ (NMI) (det. AR); Warrenpoint, ♀ 30 July, WFJ (NMI) (Johnson, 1929: p. 136 as *Lissonota femorata*).

***Lissonota* (*Lissonota*) *buccator* (Thunberg, 1824)** **New to Ireland**

DUBLIN: Lucan, ♀ 5 August 1923, AWS (NMI) (det. AR); WICKLOW: Rathdrum, ♀♀ 8 and 13 July 1926, AWS (NMI) (det. AR); Upper Liffey, ♀ 2 September 1927, AWS (NMI) (det. AR).

***Lissonota* (*Lissonota*) *carbonaria* Holmgren, 1860** **New to Ireland**

DUBLIN: Slade Bk (Brook), 19 April 1945, AWS (NMI); WICKLOW: Arklow District, 15 April 1927, AWS (NMI); Devil's Glen, 15 May 1938, AWS (NMI); Greystones, 9 April 1931, AWS (NMI).

***Lissonota* (*Lissonota*) *clypealis* Thomson, 1877** **New to Ireland**

WICKLOW: Bellevue, 11 July 1945, AWS (NMI).

***Lissonota* (*Lissonota*) *clypeator* (Gravenhorst, 1820)**

DOWN: Newcastle, ♂ 25 August, WFJ (Johnson, 1929: p. 136); LOUTH: Termonfeckin, ♂ 9 July 1929, WFJ (NMI) (det. RA) (unpublished).

***Lissonota* (*Lissonota*) *coracina* (Gmelin, 1790)**

synonym *Lissonota bellator* Gravenhorst, 1829

synonym *Lissonota irrigua* Thomson, 1888

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota bellator*. ♀); New Forge, near Belfast, ♂ 28 August 1909, HLO; ARMAGH: Poyntzpass, ♂♀30 July and 9 October 1909, WFJ (Johnson, 1912a: p. 78 as *Lissonota ubellator* Gravenhorst (misprint)); DONEGAL: Coolmore, August and September 1912 (NMI), abundant on flowers of wild carrot *Daucus carota*,WFJ (Johnson, 1913:

p. 140 as *Lissonota bellator*; Johnson, 1914a: p. 66 as *Lissonota bellator.* I obtained a curious variety of this common species with the areolet pentagonal); Portnoo, September 1917, WFJ (NMI) (Johnson, 1918: p. 108 as *Lissonota bellator*); DOWN: Greencastle, ♂♀ August 1930, abundant on roadside and shore, WFJ (NMI) (Johnson, 1931c: p. 140 as *Lissonota bellator*); same locality, ♂ 18 and ♀ 20 August 1930, on roadside, WFJ (Johnson, 1931c: p. 140 as *Lissonota irrigua*); Newcastle, ♀♀ 24 and 25 August, 9 September (NMI), WFJ (Johnson, 1929: p. 136 as *Lissonota bellator*); Rostrevor, August 1922, ♀ 17 August 1929 (NMI), with areolet pentagonal, WFJ (Johnson, 1923: p. 38 as *Lissonota bellator*; Johnson, 1930: p. 157 as *Lissonota bellator*); same locality, Victoria Square, 20 August 1929, WFJ (Johnson, 1930: p. 157 as *Lissonota bellator*); same locality, ♀ 23 July, WFJ (Johnson, 1929: p. 136 as *Lissonota irrigua*); Warrenpoint, ♂ 15 August, WFJ (Johnson, 1929: p. 136 as *Lissonota bellator*); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (NMI) (det. AWS) (Speight and Healy, 1977: p. 153 as *Lissonota bellator*); LOUTH: Dundalk, ♂ 13 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Lissonota bellator* var. *arvicola* Gr. (scutellum black); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota bellator*. ♀); MAYO: Clare Island, both sexes, JNH and CM (NMI); Old Head woods, 13 July 1910, CM; Westport, JNH (Morley, 1911a: p. 12 as *Lissonota bellator*). There are numerous Irish specimens named by AWS in NMI.

Ireland (Stelfox, 1929c: pp 67-68 as *Lissonota bellator*; Yu, 1998: CD-Rom).

***Lissonota* (*Lissonota*) *deversor* Gravenhorst, 1829** **New to Ireland**

DOWN: Sl.-na-Maddy (Slieve na Maddy), 31 July 1957, AWS (NMI); WICKLOW: Athdown, 25 July 1950, AWS (NMI); L. (Lough) Nahanigan, 10 July 1949, AWS (NMI); Rathdrum, 26 July 1930, AWS (NMI).

***Lissonota* (*Lissonota*) *dubia* Holmgren, 1856**

DONEGAL: Coolmore, August 1912, at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1914a: p. 66); DOWN: Rostrevor, ♂ 8 August 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 157); MAYO: Lough Namucka, ♀ July 1910, JNH (NMI)

(Morley, 1911a: p. 13).

***Lissonota* (*Lissonota*) *fletcheri* Bridgman, 1882**

DONEGAL: Coolmore, among sallows *Salix*, WFJ (Johnson, 1915: p. 132).

***Lissonota* (*Lissonota*) *folii* Thomson, 1877**

synonym *Lissonota transversa* Bridgman, 1889

DONEGAL: Coolmore, August 1912, WFJ (NMI) (Johnson, 1913: p. 140 as *Lissonota transversa*).

***Lissonota* (*Lissonota*) *fundator* (Thunberg, 1824)**

synonym *Lissonota sulphurifera* Gravenhorst, 1829

ARMAGH: Acton Glebe, WFJ (Morley, 1908a: p. 207 as *Lissonota sulphurifera*; Poyntzpass, ♂ 9 October 1909, WFJ (NMI) (Johnson, 1912a: p. 78 as *Lissonota sulphurifera*); same locality, September, met with frequently, WFJ (Morley, 1908a: p. 207 as *Lissonota sulphurifera*; Johnson, 1916a: p. 17 as *Lissonota sulphurifera*); [Poyntzpass, ♂♀ *in cop.* October, on bramble *Rubus* leaves in ditch in field, WFJ (Johnson, 1916a: p. 17 as *Lissonota sulphurifera*; Johnson, 1917b: p. 82 corrected to *L. basalis*]; same locality, ♂♀ in cop. 10 August 1915, ♂♀ in cop. 25 September 1919, sitting on a sallow *Salix* leaf, WFJ (Johnson, 1916b: p. 18 as *Lissonota sulphurifera*; Johnson, 1920a: p. 8 as *Lissonota sulphurifera*); DONEGAL: Coolmore, August and September 1912, WFJ (Johnson, 1913: p. 140 as *Lissonota sulphurifera*); Portnoo, September 1917, WFJ (NMI) (Johnson, 1918: p. 109 I took a female with the coxae red); DOWN: Greencastle, ♂♀ 26 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as *Lissonota sulphurifera*); Newcastle, ♀ 23 August, WFJ (Johnson, 1929: p. 136 as *Lissonota sulphurifera*); Rostrevor, ♂♀ September 1924 and 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota sulphurifera*); same locality, ♂♂ 30 August and 15 September, WFJ (Johnson, 1929: p. 136 as *Lissonota sulphurifera*); same locality, ♀ 24 August 1929, WFJ (NMI) (det. AR) (unpublished).

Ireland (Aubert, 1978: p. 96).

[*Lissonota* species indetermined

synonym *Lissonota* (*Lissonota*) *impressor* Gravenhorst, 1829 misidentification

synonym *Lissonota basalis* Brischke, 1864

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota basalis*. ♂♀); ARMAGH: Poyntzpass, ♂♀ *in cop*. August 1915, in field, WFJ (NMI) (Johnson, 1917b: p. 82 as *Lissonota basalis*); Poyntzpass field, ♂♂ {17} September {1919}, flying over rough herbage, WFJ (NMI) (Johnson, 1920a: p. 9 as *Lissonota basalis*); DONEGAL: Coolmore, August 1917, WFJ; Portnoo, September 1917, WFJ (NMI) (both Johnson, 1918: p. 109 as *Lissonota basalis*); DOWN: Greencastle, ♀ 22 August 1930 (NMI), roadside, ♀ 29 August 1930, shore, ♂ 26 August 1930 (var. *humerella* Hab.), roadside, WFJ (Johnson, 1931c: p. 140 as *Lissonta basalis*); Newcastle, ♂ ♀ 9 September, WFJ (NMI) (Johnson, 1929: p. 136 as Lissonota *basalis*); Rostrevor, ♂ 15 August 1929, field, var. *nigricoxis* Ulbr., ♂ 15 August 1929, field, var. *humerella* Hab, WFJ (Johnson, 1930: p. 157 as *Lissonota basalis*); Warrenpoint, ♂ ♀ 20-30 August (NMI), 1 and 15 September, WFJ (Johnson, 1929: p. 136 as *Lissonota basalis*); LOUTH: Ballymascanlan, ♀ 18 September 1924, WFJ (NMI); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota basalis*. ♂♀). There are numerous Irish specimens named by AWS in NMI.

Ireland (Morley, 1908a: p. 236 as *Meniscus*. early in July, 1905, Cockayne sent me a ♂ raised from an unknown Irish Lepidopteron; Aubert, 1978: p. 78; Yu, 1998: CD-Rom).

Broad (2006) states 'Identified by Morley (1908) and Aubert (1978) as *impressor* Grav., based on Morley's interpretation of Thomson's interpretation; the species involved is apparently undescribed (Brock, pers. comm.).]

***Lissonota* (*Lissonota*) *linearis* Gravenhorst, 1829**

DOWN: Newcastle, ♀♀ 9 and 16 September, WFJ (NMI) (Johnson, 1929: p. 136).

***Lissonota* (*Lissonota*) *lineolaris* (Gmelin, 1790)**

synonym *Lissonota catenator* (Panzer, 1804)

ARMAGH: Poyntzpass, Acton Wood, {12} June {1915}, WFJ (NMI) (Johnson,

1920a: p. 9 as *Meniscus catenator*); DOWN: Rostrevor, ♀♀ {24} June 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Meniscus*); WATERFORD: Stradbally, ♀ 22-30 June1907, HWA (Morley, 1908b: p. 276 as *Meniscus catatenator*).

Ireland (Aubert, 1978: p. 71 as *Meniscus catenator*).

***Lissonota* (*Lissonota*) *maculata* Brischke, 1864**

CLARE: Lahinch, ♀, AWS; DUBLIN: Raheny, ♀ 6 July 1924, also 5♀♀, EOM; WICKLOW: various places between Arklow and Powerscourt, 17♀♀, AWS (Stelfox, 1929c: pp 67-68 my dates...June 4th, 7th, 10th (6), 12th, 13th, 14th (2), 15th, 17th, 20th, 25th, July 1st, 3rd, 6th, 8th (2), 9th and 11th).

***Lissonota* (*Lissonota*) *magdalenae* Pfankuch, 1921**

DONEGAL: Portnoo, ♀ 5 June 1918, hill, WFJ (NMI) (det. AR) (unpublished); WICKLOW: near the source of the River Liffey, elevated plateau at 1700ft, ♀ 7 June 1929, AWS (NMI) (Stelfox, 1932: p. 77 identified for me by Dr Roman).

Ireland (Aubert, 1978: p. 101).

***Lissonota* (*Lissonota*) *nigridens* Thomson, 1889**

ARMAGH: Poyntzpass, April, window, WFJ (Johnson, 1921a: p. 106); MAYO: Carrowmore Hill, 500ft, ♀ July, CM (NMI) (Morley, 1911a: p. 12).

***Lissonota* (*Lissonota*) *nitida* Bridgman, 1886**

ARMAGH: Poyntzpass, 6 August 1909, WFJ (Johnson, 1912a: p. 78); DOWN: Greencastle, ♀♀ August 1930, common on roadside, WFJ (NMI) (Johnson, 1931: p. 140).

***Lissonota* (*Lissonota*) *palpalis* Thomson, 1889** **New to Ireland**

DOWN: Rostrevor, ♀ 14 July 1929, house, WFJ (NMI) (det. AR).

***Lissonota* (*Lissonota*) *proxima* Fonscolombe, 1854**

synonym *Lissonota varipes* (Desvignes, 1856)

synonym *Lissonota commixta* Holmgren, 1860

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota variipes*. ♂♀); ARMAGH: Poyntzpass, abundant especially on thistles *Carduus*, WFJ (NMI) (Morley, 1908a: p. 203 as *Lissonata variipes*; Johnson, 1916a: p. 17 as

Lissonota variipes); same locality, 30 August 1909, WFJ (Johnson, 1912a: p. 78 as *Lissonota varipes*); DONEGAL: Coolmore, September 1912 and September 1915, August 1917, abundant on flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1913: p. 140 as *Lissonota varipes*; Johnson, 1916a: p. 17 as *Lissonota variipes*; Johnson, 1918: p. 108 as *Lissonota variipes.* A specimen with the areolet pentagonal); same locality, sandhills and roadside, WFJ (Johnson, 1915: p. 132 as *Lissonota varipes.* I took a specimen of this common species with the head entirely flavous and another with the base of the antennae red); Portnoo, September 1917, WFJ (NMI) (Johnson, 1918: p. 108 as *Lissonota variipes*); DOWN: Dromore, August 1925, WFJ (Johnson, 1927: p. 160 as *Lissonota variipes*. ♂♀); Greencastle, ♂♀ 18 and 21 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as *Lissonota commixta*); Newcastle, ♀ August 1926, WFJ (Johnson, 1927: p. 160 as *Lissonota commixta*); Rostrevor, August 1922, WFJ (NMI) (Johnson, 1922: p. 38 as *Lissonota variipes*); same locality, ♂ 23 July 1929, mill, WFJ (Johnson, 1930: p. 157 as *Lissonota variipes*. With areolet pentagonal); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota variipes*. ♂♀).

***Lissonota* (*Lissonota*) *saturator* (Thunberg, 1824)**

synonym *Lissonota vicina* Holmgren, 1860

ARMAGH: Poyntzpass, specimen 1 April 1914, crawling on window in dining room, WFJ (Johnson, 1914b: p. 122 as *Lissonota vicina*).

Ireland (Aubert, 1978: p. 185 erroneously gives Johnson 1920 as a source).

***Lissonota* (*Lissonota*) *subaciculata* Bridgman, 1886**

ARMAGH: Poyntzpass, {15} July {1914}, in field at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1915: p. 132).

***Lissonota* (*Lissonota*) *variabilis* Holmgren, 1860**

synonym *Lissonota trochanteralis* Dalla Torre, 1901

ARMAGH: Poyntzpass, {30} July {1921}, {3} August {1921}, sweeping 8.30 pm, at

angelica *Angelica*, WFJ (NMI) (Johnson, 1922b: p. 69); DOWN: Greencastle, ♀ {25} August 1930, common on roadside, WFJ (NMI) (Johnson, 1931c: p. 140); Newcastle, ♀♀ 25 August {1927} (NMI) and 15 September, WFJ (Johnson, 1929: p. 136); same locality, ♀♀ 6 and 16 September (NMI), 8 October, WFJ (Johnson, 1929: p. 136 as *Lissonota trochanteralis*); Rostrevor, {20} August 1922, WFJ (NMI) (Johnson, 1923: p. 38).

***Lissonota* (*Lissonota*) *versicolor* Holmgren, 1860** **New to Ireland**

synonym *Lissonota formosa* Bridgman, 1888

ANTRIM: Dunseverick, ♀ 26 August 1934, RCF (NMI) (det. JFP as *Lissonota formosa*).

***Lissonota* (*Loxonota*) *cruentator* Panzer, 1809**

synonym *Lissonota insignita* Gravenhorst, 1829

MAYO: Carrowmore Lough, ♂ July 1910, CM (NMI) (Morley, 1911a: p. 12 as *Lissonota insignita*).

***Lissonota* (*Loxonota*) *histrio* (Fabricius, 1798)**

synonym *Lissonota parallela* Gravenhorst, 1829

DUBLIN: The Island, 22 July 1943 and 14 August 1945, AWS (NMI) (unpublished); MAYO: Clare Island, ♂ July 1910, CM (NMI) (Morley, 1911a: p. 12 as *Lissonota parallela*); WEXFORD: Kilmore, ♂♂♀♀ 11-13 August 1898, AB (Morley, 1908a: p. 188 as *Lissonota parallela*); WICKLOW: Buckroney, 14 August 1946, AWS (NMI) (unpublished).

Banchini

***Banchus crefeldensis* Ulbricht, 1916**

DUBLIN: The Dingle, Carrickmines, ♂♂ 23 April 1927, flying around ivy *Hedera*, AAL and AWS; KILKENNY: Graignamanagh, 29 March 1929, RAP; WICKLOW: Ballyhenry, ♂♂ 28 March 1929, over gorse *Ulex*, AAL and AWS (NMI) (conf. MGF); Glenealy {♀ 11 May 1924} (NMI) (conf. MGF); Meeting of the Waters, AAL (Stelfox, 1936: p. 63).

[*Banchus falcatorius* (Fabricius, 1775)

synonym *Banchus falcator* Fabricius, 1804

GALWAY: Roundstone, sandhills, ♀; [Kinnordy, sandhills, ♀ (not Irish)] (Morley, 1908a: p. 289 as *Banchus falcator*; Stelfox, 1936: p. 63 as *Banchus falcator*).

The Morley specimen cannot be traced in BMNH and the Irish status of *B. falcatorius* requires confirmation.]

***Banchus hastator* (Fabricius, 1793)** **New to Ireland**

synonym *Banchus femoralis* Thomson, 1897

WICKLOW: Powerscourt, ♂ 19 June 1925, AWS (as *femoralis*) (USNM).

***Banchus palpalis* Ruthe, 1859**

synonym *Banchus monileatus* Gravenhorst, 1829 misidentification

DONEGAL: Kilmacrenan, July, JJK (Johnson, 1917a: p. 39 as *Banchus moniliatus* misidentification); DOWN: The White Bog, near Killough, ♂♀ 6 July 1927, on flower-heads of angelica *Angelica*, AWS (Stelfox, 1936: p. 64 as *Banchus moniliatus* misidentification); DUBLIN: Glenasmole, ♀ 14 August 1941, AWS (NMI) (det. MGF) (unpublished).

[*Banchus pictus* Fabricius, 1798

ARMAGH: Churchill, ♀, WFJ, det. CM (Johnson, 1904a: p. 256; Johnson, 1904b: p. 262; Morley, 1908a: p. 284); MAYO: Curraun district, ♂ June 1909, JNH (Morley, 1911a: p. 13: Stelfox, 1936: p. 63 but the old records for *B. pictus* are erroneous)...The two Irish records...are based on wrongly named specimens of *volutatorius* now in the National Museum).

Ireland (Aubert, 1978: p. 157).]

***Banchus volutatorius* (Linnaeus, 1758)**

synonym *Banchus monileatus* Gravenhorst, 1829

synonym *Banchus farrani* Curtis, 1836

ARMAGH: Churchill, WFJ (Johnson, 1904a: p. 256 as *Banchus pictus*; Johnson, 1904b: p. 262 as *Banchus pictus*; Morley, 1908a: p. 284 as *Banchus pictus*; Stelfox, 1936: p. 63 wrongly named specimens of *volutatorius*); Poyntzpass, July, at hogweed *Heracleum*, WFJ (Johnson, 1916a: p. 20 the female differs from the type in having the

head entirely black except the mouth clypeus and facial orbits, which are pale; the scutellar horn, all the coxae and the entire abdomen are also black); no locality (Stelfox, 1936: p. 63); CORK (West): no locality (Stelfox, 1936: p. 63); DONEGAL: Portnoo, ♂♀ June, bog road, WFJ (NMI) (Johnson, 1919a: p. 36); same locality, mountain road, June, WFJ (NMI) (Johnson, 1920a: p. 9; Stelfox, 1936: p. 63); DOWN: no locality {Kilkeel, ♂ 19 July 1931, AWS} (NMI) (conf. MGF) (Stelfox, 1936: p. 63); DOWN: Dundrum, ♀ 3 July 1926, WFJ (Johnson, 1927: p. 160 this specimen has the head, thorax and abdomen entirely black, hind tibiae broadly black at apex, and hind tarsi black except base of metatarsus, WFJ (Johnson, 1927: p. 160); Greencastle, ♂♀ 16 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 140); Rostrevor, ♀ 7 August 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 157); Warrenpoint, ♂ 2 August, WFJ (Johnson, 1929: p. 136); DUBLIN: no locality {Slade Brook, ♀ 7 August 1935, AWS} (NMI) (conf. MGF) (Stelfox, 1936: p. 63); GALWAY: Connemara, ♂ lectotype July 1834, on the sand-hills flying around sea radish *Raphanus raphanistrum maritimus*, J. Curtis (NMV) (Curtis, 1836: 588. I have named it after my esteemed friend Dr. Farran of Dublin, who was of our party; Fitton, 1976: p. 322 as *Banchus farrani*.); KERRY (South): no locality (Stelfox, 1936: p. 63); KILDARE: Mouds Bog, ♂ 9 June 1984, swept, P. Ashe (NMI) (det. JPOC) (unpublished); LOUTH: no locality (Stelfox, 1936: p. 63); MAYO: Curraun district, ♂ June 1909, JNH (NMI) (Morley, 1911a: p. 13 as *Banchus pictus*; Stelfox, 1936: p. 63 Halbert and wrongly named specimen of *volutatorius*); WATERFORD: no locality (Stelfox, 1936: p. 63); WEXFORD: no locality {Clone, ♀ 14 July 1929, AWS} (NMI) (conf. MGF) (Stelfox, 1936: p. 63); Great Saltee Island, ♂ 13 July 1978, M. de Courcy Williams (NMI) (det. JPOC) (unpublished); WICKLOW: no locality {Ballyneddin, ♂ 23 June 1928, AWS} (NMI) (conf. MGF) (Stelfox, 1936: p. 63).

Ireland (Aubert, 1978: p. 158).

***Exetastes adpressorius* (Thunberg, 1824)**

synonym *Exetastes guttatorius* Gravenhorst, 1829

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Exetastes*

guttatorius. ♀); ARMAGH: Poyntzpass, field, {3, 5 and 10} August {1920}, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1921a: p. 106 plentiful); same locality, {21} July {1918}, field, WFJ (NMI) (Johnson, 1919a: p. 36 as *Exetastes guttatorius*); DOWN: Rostrevor, Victoria Square, ♀♀ 20 and 28 August 1929, WFJ (NMI) (Johnson, 1930: p. 157 as *Exetastes guttatorius*); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Exetastes guttatorius*. ♀).

***Exetastes atrator* (Förster, 1771)**

synonym *Exetastes cinctipes* (Retzius, 1783)

DOWN: Greencastle, ♀ 19 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 140 as *Exetastes cinctipes*); Rostrevor, ♀ 7 August 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 157 as *Exetastes cinctipes*); DUBLIN: Lambay Island, ♀ October 1906, JNH (NMI) (Morley, 1911c: p. 20 as *Exetastes cinctipes*; Anon., 1913: p. 43 as *Exetastes cinctipes*).

***Exetastes femorator* Desvignes, 1856**

WICKLOW: Powerscourt, ♀ 19 June 1925, AWS (Stelfox, 1936: p. 63 as *Banchus*).

******Exetastes fornicator* **(Fabricius, 1781)** **New to Ireland**

TIPPERARY: Mount Butler, ♀ 17 August 1927, RAP (NMI) (det. AR and AWS).

***Exetastes illusor* Gravenhorst, 1829**

DOWN: Rostrevor, ♂♀ 2 July 1930, field opposite, WFJ (Johnson, 1931a: p. 54 *teste* Dr Roman). There are other WFJ specimens from this site under this name in NMI.

***Exetastes nigripes* Gravenhorst, 1829**

ARMAGH: Poyntzpass, field, August, at hogweed *Heracleum*, WFJ (Johnson, 1921a: p. 106); DOWN: Rostrevor, 30 July, WFJ; Warrenpoint, 30 July and 15 August, WFJ (NMI) (both Johnson, 1929: p. 136 as *Exetastes nigridens* Gr. var. *illusor*).

Glyptini

******Apophua bipunctoria* **(Thunberg, 1824)** **New to Ireland**

synonym *Apophua flavolineata* (Gravenhorst, 1829)

CLARE: Glenville, Lahinch, 23, 24 and 25 July 1924 (NMI); WATERFORD: Kilgreany, Dungarvan, 12 August 1928, AWS (NMI); WEXFORD: Kilgorman, 2

August 1929, AWS; WICKLOW: Arklow District, 28 August 1925, AWS (NMI); Deputy's Pass, 24 July 1929, AWS (NMI); Meeting Waters (Meetings of the Waters), 17 July 1929, AWS (NMI); Ow Valley, 8 August 1929, AWS (NMI) (all as *flavolineata*).

Ireland (Haliday specimen with green label and *flavolineata* in his hand also Morley determination label (NMI)).

***Apophua evanescens* (Ratzeburg, 1848)** **New to Ireland**

WICKLOW: Rathdrum, ♂ 6 August 1925, AWS (NMI) (det. AWS and AR).

***Apophua genalis* (Möller, 1883)**

ARMAGH: Poyntzpass, [July] and August, in fields, at hogweed *Heracleum*, WFJ (Johnson, 1914a: p. 66 as *Glypta*; [Johnson, 1918: p. 108 as *Glypta.* A variety with the second segment of the abdomen in the female and the second, third and fourth segments in the male red or partly red; Johnson, 1920a: pp 7-8 (referring to Johnson (1920a) Dr Roman...his suspicion was correct...it is *G. bicornis*]; Johnson, 1921a: p. 106 as *Glypta*); DONEGAL: Coolmore, September 1912, WFJ (NMI) (Johnson, 1913: p. 140 as *Glypta*); same locality, September, at Umbelliferae on roadside, WFJ (NMI) (Johnson, 1916a: p. 20 as *Glypta*); Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 36 as *Glypta*); DOWN: Rostrevor, August 1922, WFJ (NMI) (Johnson, 1923: p. 38 as *Glypta*).

***Glypta bifoveolata* Gravenhorst, 1829**

ARMAGH: Poyntzpass, August, at angelica *Angelica*, WFJ (Johnson, 1916a: p. 20); DONEGAL: Coolmore, September, on roadside, WFJ (Johnson, 1914a: p. 66); DOWN: Greencastle, ♂ 18 and ♀ 20 August 1930, roadside, WFJ (NMI) (Johnson, 1931: p. 140); Rostrevor, August 1922, September 1923, WFJ (NMI) (Johnson, 1923: p. 38 as *Glypta biforveolata*); Johnson, 1927: p. 160. ♀); same locality, Victoria Square, ♂♀ 19 August 1929, WFJ (Johnson, 1930: p. 157); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 160. ♀).

***Glypta ceratites* Gravenhorst, 1829**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 159. ♂); ARMAGH:

Poyntzpass, August, in fields and at hogweed *Heracleum* in hedge, WFJ (NMI) (Johnson, 1913: p. 140; Johnson, 1916a: p. 20; Johnson, 1917a: p. 39 a male var. with claws not pectinate; Johnson, 1919a: p. 36; Johnson, 1921a: p. 106); Poyntzpass hill, July, WFJ (Johnson, 1920a: p. 9); DONEGAL: Portnoo cliff, June, WFJ (Johnson, 1920a: p. 9); DOWN: Dundrum, August 1926, WFJ (Johnson, 1927: p. 159. ♂); Warrenpoint, ♂♀ 24 and 27 July, 2, 16 and 18 August, 30 July, WFJ (NMI) (Johnson, 1929: p. 136 teratological ♂...with growth between right antenna and eye like the beginning of a third antenna).

Ireland (Aubert, 1978: p. 58).

******Glypta consimilis* **Holmgren, 1860** **New to Ireland**

synonym *Glypta xanthognatha* Thomson, 1889

DUBLIN: Upper Glenasmole, 15 June 1927, AWS (as *xanthognatha*) (NMI).

***Glypta cylindrator* (Fabricius, 1787)**

synonym *Glypta bicornis* Boie, 1850

synonym *Glypta rostrata* Holmgren, 1860

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Glypta bicornis.* Var. with no horns (*teste* Roman); ARMAGH: Poyntzpass field, July, August, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1918: p. 108 as *Glypta bicornis* (misidentified as *G. genalis* according to Johnson (1920a); Johnson, 1920a: p. 9 as *Glypta bicornis.* Var. without horns); ARMAGH: Poyntzpass, WFJ (Johnson, 1912a: p. 78 as *Lissonota*); same locality, July and August, at flowers of Umbelliferae and thistles *Carduus*, WFJ (NMI); DONEGAL: Coolmore, September, at thistles *Carduus* and wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1916a: p. 20 as *Lissonota*); DOWN: Greencastle, ♀♀ 19, 22 and 26 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Glypta rostrata*); same locality, ♂♀ August 1930, common on roadside and shore, WFJ (NMI) (Johnson, 1931c: p. 140 as *Lissonota*); Warrenpoint, ♀ 21 August, WFJ (NMI) (Johnson, 1929: p. 136 as *Lissonota*); LOUTH: Termonfeckin, ♂♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Lissonota*).

Ireland (Aubert, 1978: p. 56).

***Glypta elongata* Holmgren, 1860**

ARMAGH: Poyntzpass, July, in fields, WFJ (Johnson, 1914a: p. 66 a variety with black abdomen; Johnson, 1916a: p. 20); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 140); same locality, September, on roadside among herbage, not common, WFJ (Johnson, 1916a: p. 20); DOWN: Greencastle, ♂ August 1930, shore towards Mill Bay, WFJ (NMI) (Johnson, 1931: p. 140); Rostrevor, ♂ July 1923, WFJ (Johnson, 1927: p. 159); same locality, ♂♀ 4 and 23 July 1929, mill, WFJ (NMI) (Johnson, 1930: pp 156-157 Dr Roman...said they were remarkable for their variation in colour; some were entirely black, others more or less red...numerous).

***Glypta femorator* Desvignes, 1856**

synonym *Glypta filicornis* Thomson, 1887

DOWN: Rostrevor, ♀ {24} June 1925, WFJ (NMI) (Johnson, 1927: p. 159 as *Glypta filicornis*. *Teste* Roman); Rostrevor, ♀ 18 {5} July, WFJ (NMI) (Johnson, 1929: p. 136 hind femora black above).

***Glypta fronticornis* Gravenhorst, 1829**

ARMAGH: Poyntzpass, August, at angelica *Angelica*, field, rare, WFJ (Johnson, 1914a: p. 66; Johnson, 1922b: p. 69); same locality, August, in fields, sweeping, WFJ (Johnson, 1916a: p. 20; Johnson, 1921a: p. 106); DONEGAL: Coolmore, August 1917, among sallows *Salix*, WFJ (Johnson, 1918: p. 108); DOWN: Greencastle, ♀ 19 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140); Warrenpoint, ♀ 30 August, WFJ (Johnson, 1929: p. 136); MAYO: Belclare, JNH; Carrowmore Hill, abundant, CM; Carrowmore Lough, CM; Clare Island, ♀ June, WFJ; Louisburgh, CM (Morley, 1911a: p. 12).

***Glypta haesitator* Gravenhorst, 1829**

ARMAGH: Poyntzpass, field, {10} August {1920}, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1921a: p. 106).

***Glypta lapponica* Holmgren, 1860**

synonym *Glypta annulata* Bridgman, 1890

ARMAGH: Poyntzpass, July, in fields, rare, WFJ (Johnson, 1914a: p. 66 as *Glypta annulata*); same locality, field, August, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1920a: p. 9 as *Glypta annulata*); DONEGAL: Coolmore, September 1916, among sallows *Salix*, WFJ (NMI) (Johnson, 1917a: p. 39 as *Glypta annulata*).
Ireland (Aubert, 1978: p. 37 as *Glypta annulata*).

***Glypta longicauda* Hartig, 1838**

synonym *Glypta nigrotrochanterata* Strobl, 1902

ARMAGH: Poyntzpass, specimen 16 August 1913, WFJ (NMI) (Johnson, 1931c: p. 139 as *Glypta nigrotrochanterata*); DOWN: Greencastle, ♀♀ 18 and 22 August 1930, common on the roadside at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1931c: pp 138, 140 as *Glypta nigrotrochanterata*. ♀ *teste* Dr A. Roman. One has the left antenna malformed; the 12th joint of the flagellum is widened so as to become transverse, and from its apex project two joints, while the rest of the flagellum continues in the usual way. This gives the appearance of a break and a fresh growth; Neave, 1931: p. 52).

***Glypta mensurator* (Fabricius, 1775)**

synonym *Glypta lugubrina* Holmgren, 1860

ARMAGH: Poyntzpass, WFJ (NMI) (Johnson, 1912a: p. 78 as *Glypta lugubrina*); DONEGAL: Coolmore, August 1912, WFJ (NMI) (Johnson, 1913: p. 140 as *Glypta lugubrina*); DOWN: Rostrevor, ♀ 30 July, WFJ (Johnson, 1929: p. 136); LOUTH: Termonfeckin, ♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Glypta lugubrina*); MAYO: Carrowmore Lough {Louisburgh, ♀ 18 July 1910}, several, CM (NMI); Westport, JNH (Morley, 1911a: p. 12 as *Glypta lugubrina*); WICKLOW: Rathdrum, ♀ 12 August 1924, AWS (NMI) (det. AWS and AR) (unpublished).

***Glypta monoceros* Gravenhorst, 1829**

CORK: Glengarriff, ♀ 21 July 1924, JNH (NMI) (det. AWS) (unpublished); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 140 as *Glypta monocerus*).

***Glypta nigricornis* Thomson, 1889** **New to Ireland**

LOUTH: Termonfeckin, ♀♀ 12 July-25 August 1924, WFJ (NMI) (det. AR); WICKLOW: Clara, ♀ 12 July 1926, AWS (NMI) (det. AWS and conf. AR).

***Glypta nigrina* Desvignes, 1856**

MAYO: Achill Sound, ♀ {June 1910}, WFJ (NMI); Carrowmore Lough, ♂ July, on reeds, CM (Morley, 1911a: p. 12).

***Glypta parvicaudata* Bridgman, 1889**

DONEGAL: Coolmore, September 1912, rare, WFJ (NMI) (Johnson, 1913: p. 140); MAYO: Sraheens Lough, ♀ June 1910, WFJ (Morley, 1911a: p. 12).

****Glypta pictipes* Taschenberg, 1863** **New to Ireland**

LAOIS: Woodbrook, 15 May 1949, AWS (NMI); WICKLOW: Athdown, 2 May 1948, AWS (NMI); Dowry, 1 June 1954, AWS (NMI).

****Glypta rufata* Bridgman, 1887** **New to Ireland**

WICKLOW: Deputy's Pass, 31 July 1929, AWS (NMI).

***Glypta scalaris* Gravenhorst, 1829**

synonym *Glypta punctifrons* Bridgman, 1890

ARMAGH: Poyntzpass, field, {5} August {1920}, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1921a: p. 106 as *Glypta punctifrons*); DONEGAL: Coolmore, {24 September 1914}, on roadside at Umbelliferae, WFJ (Johnson, 1915: p. 132 as *Glypta*); Portnoo, June, WFJ (Johnson, 1919a: p. 36); DOWN: Greencastle, ♂ 23 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140); Rostrevor, ♀ 18 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136).

****Glypta schneideri* Krieger, 1897** **New to Ireland**

ARMAGH: Poyntzpass, ♀ 18 August 1915, WFJ (NMI) (det. AR); [DONEGAL: Portnoo, on cliff, June, WFJ (Johnson, 1921a: p. 104 "probably" this species).]

***Glypta sculpturata* Gravenhorst, 1829**

DOWN: Greencastle, ♂♀ August 1930, roadside, WFJ (NMI) (Johnson, 1931: p. 140); LOUTH: Termonfeckin, ♂ August 1924, WFJ (NMI) (Johnson, 1927: p. 160).

***Glypta similis* Bridgman, 1886**

DOWN: Newcastle, ♀ 25 August {1927}, WFJ (NMI) (Johnson, 1929: p. 136 rather

small, 6mm, fourth point of hind tarsi shorter than fifth).

***Glypta trochanterata* Bridgman, 1886**

ARMAGH: Poyntzpass, June, July and August, in field, at knapweed *Centaurea*, WFJ (NMI) (Johnson, 1916a: p. 20; Johnson, 1917a: p. 39 among those taken in June was a female which varied in having the hind trochanters parly black instead of entirely so; Johnson, 1922b: p. 69); LOUTH: Termonfeckin, ♀ August 1924, WFJ (Johnson, 1927: p. 159).

***Glypta vulnerator* Gravenhorst, 1829**

ARMAGH: Poyntzpass, August, hill, WFJ (NMI) (Johnson, 1919a: p. 36); Poyntzpass field, August, at hogweed *Heracleum*, WFJ (Johnson, 1920a: p. 9; Johnson, 1921a: p. 106); DOWN: Greencastle, ♂♀ 4 and 20 August 1930, roadside, WFJ (Johnson, 1931c: p. 140); LOUTH: Termonfeckin, ♂ August 1924, WFJ (Johnson, 1927: pp 159-160).

Ireland (Aubert, 1978: p. 55).

CAMPOPLEGINAE

This is a large and important subfamily with over 2,000 described species. It is world-wide in distribution, but is most diverse in cooler areas: the temperate regions and at high altitudes in the tropics. Many campoplegines are parasites of serious pests and several have been used in biological control programmes. Taxonomically the subfamily is a difficult and poorly studied group. Species are often difficult or impossible to separate morphologically without some prior knowledge of other aspects of their biology. It is impossible to identify easily or reliably the majority of European species and the current generic classification is not satisfactory. More than 250 species are recorded from Britain.

The overwhelming majority of species of Campopleginae develop as solitary koinobiont endoparasites of larval Lepidoptera. Within the subfamily, one characteristic, and probably advanced, life-history strategy is for oviposition into an early larval instar and for the parasite larva to complete its development before the

host larva is fully-grown. In this way thes campoplegines successfully compete with the groups of parasites which attack, or at least develop in, well-grown hosts. However, it means that the campoplegine larva reaches maturity in an environment which often is much less well protected than is the case for most ichneumonids. Thus, the cocoon stage of these campoplegines exhibits a wide variety of adaptations to aid avoidance of natural enemies and other hazards. Some examples are: construction of a false cocoon, possibly to distract attention from the real thing; having the cocoon suspended at the end of a long thread; mimicry of bird droppings; spinning the cocoon within the shrivelled remains of the host; and possessing the ability to 'jump' (brought about by the final instar larva, which has a caudal appendage probably associated with this behaviour). Cocoon dimorphism is also found in campoplegines: for example, in *Bathyplectes curculionis* (Thomson) the cocoons made by overwintering, diapausing larvae are darker in colour, thicker walled, and take longer to construct than cocoons of non-diapausing larvae of the summer generation(s).

Some groups of campoplegines utilize hosts other than Lepidoptera - they have switched from caterpillars to the similarly phytophagous larvae of sawflies (Hymenoptera: 'Symphyta') and leaf beetles and weevils (Coleoptera: Chrysomelidae and Curculionidae). One lineage, comprising *Xylophylax*, *Nemeritis* and *Pyracmon*, attacks concealed larvae of beetles (Cerambycidae, Curculionidae, possibly Scolytidae, Elateridae and Artematopidae) and snake-flies (Raphidioptera), below bark and in the soil.

Campoplegines, as far as is known, always attack the host in its larval stage. Species of most genera attack older host larvae and do not complete their development until the host has constructed its cocoon. Certain species of *Campoplex* may even spin their own cocoon within the pupal shell of the host.

Although there can be considerable variation between closely related species, most individual species appear to have rather narrow host ranges, and to be physiologically well adapted to their hosts. As in many subfamilies the most obvious outward signs of adaptation are in overall size and in ovipositor structure. For instance, *Dusona* species

are relatively large and have very short ovipositors, they attack macrolepidoptera (often Geometridae) larvae on trees and shrubs, which do not conceal themselves whilst feeding. Several species of campoplegines are now known to possess a virus which the female injects into the host in the venom at oviposition. The virus particles replicate in the cells of a thickened part of the lateral oviduct, the calyx, of the female ichneumonid. It has been shown that the virus is essential for the successful development of the campoplegine larva. If the virus, the other components of the venom, or both are not injected into the host then the parasite egg or larva is encapsulated and dies. The viruses associated with campoplegines belong to the polydna-virus group and similar ones have been found in a banchine and tentatively identified in a ctenopelmatine.

***Bathyplectes anura* (Thomson, 1887)** **New to Ireland**

DUBLIN: C'L'D'K'N (Clondalkin), 14 May 1944, AWS (NMI).

***Bathyplectes curculionis* (Thomson, 1887)**

WEXFORD: Curracloe, ♀ 20 July 1937, AWS (NMI) (det. Horstmann) WICKLOW: ♀ 11 June 1950, AWS (NMI) (det. RWC) (both unpublished).

Ireland (Horstmann, 1974: p. 74 Washington, p. 75 var. 1. Washington).

***Bathyplectes exiguus* (Gravenhorst, 1829)**

KILDARE: Royal Canal, ♀ 12 July 1944, AWS (NMI) (det. AWS and conf. Horstmann) (unpublished).

Ireland (Horstmann, 1974: p. 75 Washington).

***Bathyplectes immolator* (Gravenhorst, 1829)**

synonym *Bathyplectes marginella* (Thomson, 1887)

WICKLOW: Arklow District, ♂ 29 March 1929, AWS (NMI) (det. AWS as *Bathyplectes marginella*, conf. Horstmann) (unpublished).

Ireland (Horstmann, 1974: p. 79 as *Biolysia*. Washington).

***Bathyplectes infernalis* (Gravenhorst, 1820)**

synonym *Biolysia tristis* (Gravenhorst, 1829)

DONEGAL: Tramore Horn, ♀ 12 June 1955, AWS (NMI) (det. Horstmann as

Biolysia tristis); KILDARE: Landenstown, ♀ 24 June 1951, AWS (NMI) (det. Horstmann as *Biolysia tristis*); Royal Canal, ♀ 15 September 1940, AWS (NMI) (det. RWC as *Biolysia tristis*) (all unpublished).

Ireland (Horstmann, 1974: p. 78 as *Biolysia tristis*. Washington).

***Bathyplectes quinqueangularis* (Ratzeburg, 1852)**

Ireland (Horstmann, 1974: p. 65 Washington).

***Bathyplectes rostratus* (Thomson, 1887)**

CARLOW: Kilcarry, 8 August 1930, AWS (NMI) (unpublished).

Ireland (Horstmann, 1974: p. 72 Washington).

***Campoletis agilis* (Holmgren, 1860)**

DOWN: Newcastle, ♂ 9 May {1927}, WFJ (NMI); Rostrevor, ♂ 28 July {1927}, WFJ (NMI) (both Johnson, 1929: p. 137 as *Sagaritis*).

***Campoletis annulata* (Gravenhorst, 1829)**

synonym *Sagaritis maculipes* Tschek, 1871

ARMAGH: Poyntzpass, {19} August {1921}, fields at angelica *Angelica*, WFJ (NMI) (Johnson, 1922b: p. 70 as *Sagaritis*); DOWN: Newcastle, ♂ 17 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Sagaritis maculipes*); Rostrevor, 6 June 1929, river, WFJ (NMI) (Johnson, 1930: p. 157 as *Sagaritis maculipes*); same locality, ♀ 8 August 1929, field opposite, WFJ (Johnson, 1930: p. 157 as *Sagaritis*); LOUTH: Termonfeckin, ♂ July 1924, WFJ (Johnson, 1927: p. 160 as *Sagaritis maculipes*).

***Campoletis crassicornis* (Tschek, 1871)**

DOWN: Greencastle, ♀ 16 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 141 as *Sagaritis*); Newcastle, ♂♀ 9 May and 13 June {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Sagaritis*).

***Campoletis dilatator* (Thunberg, 1824)**

synonym *Campoletis declinator* (Gravenhorst, 1829) misidentified of authors

ARMAGH: Poyntzpass, {29} June {1912} (NMI) and August, fields, WFJ (Johnson, 1922b: p. 69 as *Sagaritis declinator*); DOWN: Rostrevor, ♀♀ 8 and 23 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Sagaritis declinator*).

***Campoletis ensator* (Gravenhorst, 1829)**

ANTRIM: Belfast, August {13.June1909}, HLO (NMI); ARMAGH: Poyntzpass, {26} June {1907}, WFJ (NMI) (Johnson, 1913: p. 141 as *Omorga*; Morley, 1915: p. 154 as *Omorga*); DONEGAL: Coolmore, {16} September {1915}, among sallows *Salix*, WFJ (NMI) (det. CM) (Johnson, 1916a: p. 21 as *Omorga*).

***Campoletis femoralis* (Gravenhorst, 1829)**

DOWN: Newcastle, ♂♂ 9, 18 and 25 May, WFJ {1927} (NMI) (Johnson, 1929: p. 137 as *Sagaritis*. Var. 1, Holmgren, hind femora red).

***Campoletis fuscipes* (Holmgren, 1856)**

MAYO: Carrowmore Lough, ♀, swept from reeds *Phragmites*, CM (Morley, 1911a: p. 14 as *Eophora* (misspelling of *Ecophora*)).

***Campoletis holmgreni* (Tschek, 1871)**

DOWN: Newcastle, ♂♀ 7 and 31 May, 11 June, WFJ; same locality, ♂ 30 May, hind femora red, WFJ; Rostrevor, ♀♀ 14 and 15 July {1927}, WFJ (NMI) (all Johnson, 1929: p. 137 as *Sagaritis*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Sagaritis*).

***Campoletis incisa* (Bridgman, 1883)** **New to Ireland**

SLIGO: Trawallua, ♀ 25 July 1933, AWS (NMI) (det. JFP and conf. RWC); WICKLOW: Powerscourt, ♀ 16 May 1926, AWS (NMI) (det. JFP).

***Campoletis latrator* (Gravenhorst, 1829)**

synonym *Campoletis latrator* (Schrank, 1802) preoccupied

ARMAGH: Poyntzpass, {2} August {1921}, fields, at angelica *Angelica*, WFJ (NMI) (Johnson, 1922b: p. 69 as *Sagaritis*); DOWN: Newcastle, ♂ 9 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Sagaritis*); WICKLOW: Powerscourt Demense, ♀ 2 June 1929, AWS (NMI) (det. JFP) (unpublished).

***Campoletis postica* (Bridgman and Fitch, 1885)**

synonym *Campoletis postica* (Bridgman, 1886)

ARMAGH: Poyntzpass, {19} May {1917} and {23} August {1920}, garden and in a lane at flowers of hedge parsley *Torilis*, WFJ (NMI) (Johnson, 1918: p. 109 as

Sagaritis postica; Johnson, 1921a: p. 107 as *Sagaritis postica*); DOWN: Newcastle, ♀ {20} August 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Sagaritis postica*); Rostrevor, ♀ 23 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Sagaritis postica*).

***Campoletis punctata* (Bridgman, 1886)**

ARMAGH: Poyntzpass, {27} May {1919} and {26} July {1918}, field, WFJ (Johnson, 1919a: p. 37 as *Sagaritis*; Johnson, 1921a: p. 107 as *Sagaritis*); Poyntzpass hill, May, WFJ (Johnson, 1920a: p. 10 as *Sagaritis*); DOWN: Newcastle, ♂ 6 May {1927}, WFJ (Johnson, 1929: p. 137 as *Sagaritis*); Rostrevor, the Lodge demense, July 1922, {8 July 1927}, WFJ (NMI) (Johnson, 1923: p. 38 as *Sagaritis*); same locality, ♂♂ 8 and 27 July, WFJ (Johnson, 1929: p. 137 as *Sagaritis*); WICKLOW: Glen of Imaal, ♀ 27 May 1926, AWS (NMI) (det. JFP); Powerscourt, ♂ 16 May 1926, AWS (NMI) (det. JFP) (both unpublished).

***Campoletis rapax* (Gravenhorst, 1829)**

synonym *Campoletis erythropus* (Thomson, 1887)

ARMAGH: Poyntzpass hill, {10} May, WFJ (NMI) (Johnson, 1910: p. 10 as *Sagaritis erythropus*); DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Sagaritis erythropus*); WICKLOW: Arklow District, ♂ 9 June 1926, AWS (NMI) (det. JFP as *Campoletis erythropus*); Clara, ♂ 8 June 1926, AWS (NMI) (det. JFP as *Campoletis erythropus*) (both unpublished).

***Campoletis varians* (Thomson, 1887)**

DOWN: Newcastle, ♂♂ 7 May and 25 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Sagaritis*).

***Campoletis viennensis* (Gravenhorst, 1829)**

synonym *Dusona annulator* (Zetterstedt, 1838)

DONEGAL: Coolmore, {17} September {1912}, WFJ (Johnson, 1913: p. 141 as *Echphoropsis*); same locality, September 1916, among herbage, WFJ (Johnson, 1917a: p. 40 as *Limnerium annulator*); Portnoo, June, sandhills, WFJ (Johnson, 1920a: p. 10 as *Limnerium annulator*); LOUTH: Carlingford, {25} May {1912}, WFJ

(Johnson, 1913: p. 141 as *Echphoropsis*); MAYO: Clare Island, {June 1910}, WFJ (NMI) (Johnson, 1914: p. 142 as *Ecphoropsis*. Johnson has taken many specimens of a small form).

***Campoletis zonata* (Gravenhorst, 1829)**

DOWN: Dundrum, ♂ {4} August 1926, WFJ (NMI); Newcastle, ♂ {9, 11, 17, 25 and 27} August 1926, WFJ (Johnson, 1927: p. 160 as *Sagaritis*).

[***Campoplex* sp.**

KERRY: Caragh Lake, ♀ 13 August 1901, JWY; Kenmare, ♂ 7 July 1901, JWY (Morley, 1902: p. 55).]

***Campoplex borealis* (Zetterstedt, 1838)**

DOWN: Greencastle, ♀ 22 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 141 as *Omorga*. *Teste* Dr Roman); MAYO: Clare Island (Morley, 1915: p. 150 as *Omorga*).

***Campoplex cursitans* (Holmgren, 1860)**

ARMAGH: Poyntzpass, June and {27} August {1920}, in fields, WFJ (NMI) (Johnson, 1913: p. 141 as *Omorga*; Johnson, 1917a: p. 40 as *Omorga*; Johnson, 1921a: p. 107 as *Omorga*); DOWN: Warrenpoint, ♂ 28 May {1928}, WFJ (NMI) (Johnson, 1929 as *Omorga*).

***Campoplex difformis* (Gmelin, 1790)**

synonym *Campoplex mutabilis* (Holmgren, 1860)

ARMAGH: Poyntzpass, July 1916, in field, WFJ (Johnson, 1917a: p. 40 as *Omorga*); same locality, {3 and 12} August {1919 and 1921}, window, at angelica *Angelica*, WFJ (NMI) (Johnson, 1913: p. 141 as *Omorga mutabilis*; Johnson, 1920a: p. 10 as *Omorga mutabilis*; Johnson, 1922b: p.69 as *Omorga mutabilis*); DONEGAL: Portnoo shore, {10} June {1919}, WFJ (NMI) (Johnson, 1920a: p. 10 as *Omorga*); same locality, cliff and shore, {10} June {1919} and September, WFJ (Johnson, 1920a: p. 10 as *Omorga mutabilis*); DOWN: Rostrevor, ♀ June 1923, WFJ (Johnson, 1927: p. 161 as *Omorga mutabilis*); same locality, ♂ 7 August 1929, field opposite, WFJ (Johnson, 1930: p. 157 as *Omorga mutabilis*); LOUTH: Carlingford, {11, 17 and 20}

June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Omorga mutabilis*); Termonfeckin, ♀ {9} August 1924, WFJ (NMI) (Johnson, 1927: p. 161 as *Omorga mutabilis*).

***Campoplex eudoniae* Horstmann and Yu, 1999** **New to Ireland**

synonym *Campoplex ruficoxa* (Thomson, 1887)

DOWN: Rostrevor, 4 May 1926, WFJ (as *ruficoxa*) (NMI).

***Campoplex faunus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, September, WFJ (NMI) (Johnson, 1920a: p. 10 as *Omorga*); DONEGAL: Coolmore, August and {7, 9, 11, 17, 18 and 20} September {1912 and 1913}, WFJ (Johnson, 1920a: p. 10 as *Omorga*; Morley, 1915: p. 147 as *Omorga*); Portnoo shore, {16} June {1919}, WFJ (Johnson, 1920a: p. 10 as *Omorga*); DOWN: Ballyworkan, July, WFJ (Johnson, 1913: p. 141 as *Omorga*); WEXFORD: Kilmore, AB (Morley, 1915: p. 147 as *Omorga*).

***Campoplex hadrocerus* (Thomson, 1887)**

synonym *Campoplex fasciata* (Bridgman, 1889)

ARMAGH: Poyntzpass, field, October, sweeping, WFJ (Johnson, 1921a: p. 107 as *Omorga fasciata*).

***Campoplex lugubrinus* (Holmgren, 1860)**

MAYO: Clare Island, couple of ♀♀ swept from grass, CM (Morley, 1911a: p. 15 as *Omorga*).

***Campoplex lyratus* (Thomson, 1887)**

Ireland (Broad, 2006).

***Campoplex multicinctus* Gravenhorst, 1829**

ARMAGH: Poyntzpass hill and lane, {10} May {1915} (NMI) and June 1916, WFJ (Johnson, 1917a: p. 40 as *Omorga*); same locality, September, caught by hand on herbage, WFJ (Johnson, 1922b: p. 69 as *Omorga*); DOWN: Greencastle, ♀ 21 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 141 as *Omorga*); LOUTH: Carlingford, {11} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Omorga*).

***Campoplex punctulatus* (Szépligeti, 1916)** **New to Ireland**

CAVAN: Lough Mentis, ♀ 5 June 1940, RCF (BMNH).

***Campoplex pyraustae* Smith, 1931** **New to Ireland**

KILDARE: west of Leixlip, ♀ 16 August 1942, AWS (BMNH).

***Campoplex rufipes* Gravenhorst, 1829**

synonym *Campoplex angulatus* (Thomson, 1887)

DOWN: Greencastle, ♀ 16 August 1930, sandhills, ♀ 21 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 141 as *Omorga angulatus*. *Teste* Dr Roman).

***Campoplex tumidulus* Gravenhorst, 1829**

MAYO: Louisburgh, ♂ July, swept from herbage, CM (Morley, 1911a: p. 15 as *Omorga*).

***Casinaria affinis* Tschek, 1871**

DOWN: Dundrum, ♂ {12} August 1926, WFJ (NMI) (Johnson, 1927: pp 160-161).

***Casinaria albipalpis* (Gravenhorst, 1829)**

DOWN: Newcastle, ♂ 12 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137).

***Casinaria ischnogaster* Thomson, 1887**

DONEGAL: Portnoo, {8} June {1918}, WFJ (NMI) (Johnson, 1919a: p. 37); DOWN: Newcastle, ♂ 9 May and ♀ 8 October {1927}, WFJ (NMI) (Johnson, 1929: p. 137); Rostrevor, ♀ 7 June 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157); LOUTH: Carlingford, {17} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17).

***Casinaria pallipes* Brischke, 1880**

ARMAGH: Poyntzpass, {1} June {1912}, WFJ (NMI) (Johnson, 1913: p. 141 as *Casinaria pallidipes*; Morley, 1915: p. 110 as *Casinaria pallidipes*).

[***Clypeoplex cerophagus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass field, August, at hogweed *Heracleum*, WFJ; DONEGAL: Portnoo cliff, June, WFJ (both Johnson, 1920a: p. 10 as *Angitia*); DOWN: Dromore, ♂ August 1925, WFJ (Johnson, 1927: p. 161 as *Angitia*); Newcastle, ♂♂ 18-26 May and 25 August, WFJ (Johnson, 1929: p. 137 as *Angitia*).

This species has been split into *C. eucerophaga* Horstmann, 1969 and *C. neocerophaga* Horstmann, 1969.]

***Cymodusa* (*Cymodusa*) *antennator* (Holmgren, 1860)** **New to Ireland**

DOWN: Tollymore Park, ♀ 10 September 1961, AWS (NMI) (det. RWC).

***Cymodusa* (*Cymodusa*) *cruentata* (Gravenhorst, 1829)**

DONEGAL: Coolmore, {25 September 1914}, at wild carrot *Daucus carota*, WFJ (NMI) (det. CM) (Johnson, 1915: p. 133).

***Cymodusa* (*Cymodusa*) *exilis* Holmgren, 1860**

ARMAGH: Poyntzpass, field, August, WFJ (Johnson, 1921a: p. 107).

***Cymodusa* (*Cymodusa*) *leucocera* Holmgren, 1859**

ARMAGH: Poyntzpass, ♂ 2 October 1920, WFJ (NMI) (det. AR) (unpublished); DONEGAL: Coolmore, {17 and 25} September {1913 and 1914}, on roadside, WFJ (NMI) (Johnson, 1914a: p. 67); Portnoo, June, {10} September {1918} (det AR), cliff, WFJ (Johnson, 1919a: p. 37; Johnson, 1920a: p. 10).

***Diadegma areolare* (Holmgren, 1860)** **New to Ireland**

DUBLIN: Greenhills, ♀ 24 October 1954, AWS (NMI) (det. JFP).

***Diadegma armillata* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, Acton Wood, June 1916, WFJ (Johnson, 1917a: p. 40 as *Angitia*); DOWN: Newcastle, ♂♂ 6 and 12 May {1927}, 5 September, WFJ; Rostrevor, ♂ 14 July, WFJ; Warrenpoint, ♂ 10 August {1928}, ♀ 30 July {1928}, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia*).

***Diadegma chrysostictos* (Gmelin, 1790)**

DOWN: Dromore, ♂ August 1925, WFJ (NMI) (Johnson, 1927: p. 161 as *Angitia*); Newcastle, ♂♂ 6 May {1927}, 11 August {1927} and 17 September {1927}, WFJ (NMI); Warrenpoint, ♂ 16 August {1928}, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia*).

***Diadegma claripenne* (Thomson, 1887)**

ANTRIM: Cave Hill, Belfast, HLO (NMI) (Johnson, 1913: p. 141 as *Augitia*); DOWN: Newcastle, ♂♂ 6 and 18 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia claripennis*).

***Diadegma combinatum* (Holmgren, 1860)**

DOWN: Newcastle, ♂♂ 2-5 September {1927}, WFJ (NMI) (Johnson, 1929: p.137 as

Angitia).

***Diadegma crassicorne* (Gravenhorst, 1829)**

ANTRIM: Killead, ♀ August 1923, WFJ (Johnson, 1927: p. 161 as *Meloboris*); ARMAGH: Poyntzpass, June and {9} August {1915}, in fields, at hogweed *Heracleum*, WFJ (Johnson, 1913: p. 141 as *Meloboris*; Morley, 1915: p. 173 as *Meloboris*; Johnson, 1917a: p. 40 as *Meloboris*; Johnson, 1920a: p. 10 as *Meloboris*; Johnson, 1921a: p. 107 as *Meloboris*); DONEGAL: Coolmore, {2 September 1914} on roadside at wild carrot *Daucus carota*, WFJ (Johnson, 1915: p. 133); Portnoo, shore, {10 and 30} June {1919 and 1920}, September, sand hills, WFJ (Johnson, 1919a: p. 37 as *Meloboris*; Johnson, 1920a: p. 10 as *Meloboris*); DOWN: Greencastle, ♀ {21 and 22} August 1930, common on roadside, WFJ (NMI) (det AR) (Johnson, 1931c: p. 141 as *Meloboris*); Newcastle, August, WFJ (NMI) (Johnson, 1913: p. 141 as *Meloboris*; Morley, 1915: p. 173 as *Meloboris*); Rostrevor, Victoria Square, ♂ 24 August 1929, WFJ (NMI) (Johnson, 1929: p. 157 as *Meloboris*); KERRY: Kenmare, ♀ 26 July 1908, HWA (Morley, 1908b: p. 276 as *Meloboris*); Waterville, ♀ 26 July 1901, JWY (Morley, 1902: p. 55 as *Limneria*; Morley, 1915: p. 173 as *Meloboris*); MAYO: Carrowmore Hill, several ♂♂, CM (Morley, 1911a: p. 15 as *Meloboris*); Lough Namucka, JNH (Morley, 1911a: p. 15 as *Meloboris*; Morley, 1915: p. 173 as *Meloboris*. As Lake Nemocka); Louisburgh, several ♂♂, CM (Morley, 1911a: p. 15 as *Meloboris*; Morley, 1915: p. 173 as *Meloboris*); SLIGO: Kesh, ♀ 3 August 1929, AMG (NMI) (det. RWC) (unpublished).

***Diadegma cylindricum* Brischke, 1880**

ARMAGH: Poyntzpass field and hill, July and October, in herbage, WFJ (Johnson, 1920a: p. 10 as *Angitia*; Johnson, 1921a: p. 107 as *Angitia*); DOWN: Dromore, ♂ August 1925, WFJ; Dundrum, ♂ August 1926, WFJ; Rostrevor, ♂ October 1924, WFJ (Johnson, 1927: p. 161 as *Angitia*); MAYO: Clare Island, ♀ July, CM (Morley, 1911a: p. 14 Stelfox annotation says *Angita*); LOUTH: Termonfeckin, ♂ August 1924, WFJ (Johnson, 1927: p. 161 as *Angitia*).

***Diadegma elishae* (Bridgman, 1884)**

MAYO: Carrowmore Hill, both sexes commonly, CM; Clare Island, several ♀♀, CM; Louisburgh, both sexes commonly, CM (Morley, 1911a: p. 15 as *Angitia*).

***Diadegma erucator* (Zetterstedt, 1838)**

synonym *Diadegma rufipes* misidentified

ARMAGH: Poyntzpass, field, {7} August {1920}, WFJ (NMI) (Johnson, 1921a: p. 107 as *Angitia rufipes*); DONEGAL: Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 37 as *Angitia rufipes*); DOWN: Rostrevor, ♀ 31 May 1929, woods, ♀ 27 June 1929, large 8mm, in fields at nettles *Urtica*, WFJ (NMI) (Johnson, 1930: p. 157 as *Angitia rufipes*); Warrenpoint, ♀♀ 27 July, 18-30 August (NMI), common on thistles *Carduus*, WFJ (Johnson, 1929: p. 137 as *Angitia rufipes*); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Angitia rufipes*); MAYO: Clare Island, 2♀♀, swept from hebage, CM (Morley, 1911a: p. 15 as *Angitia rufipes*).

***Diadegma exareolator* Aubert, 1964**

CLARE: Burren, ♂♂ 16 June 1951, J. D. Bradley, ex pupae of *Caloptilia tringipennella* (now *Aspilapteryx tringipennella* (Zeller)) (Lepidoptera: Gracillariidae) (BMNH) (det. KH) (Shaw and Horstmann, 1997: p. 283)

Ireland (Yu, 1998 CD-Rom).

***Diadegma fenestrale* (Holmgren, 1860)**

ARMAGH: Poyntzpass hill, {10} May {1915}, WFJ (NMI) (Johnson, 1917a: p. 40 as *Angitia*); Poyntzpass, May, sweeping grass, WFJ (Johnson, 1922b: p. 69 as *Angitia*); DONEGAL:Coolmore, {18} September {1913}, on a roadside, WFJ (NMI) (Johnson, 1914a: p. 67 as *Angitia*); same locality, {4 and 5} September {1914}, in window, flying among sallows *Salix*, WFJ (NMI) (det. CM) (Johnson, 1915: p. 133 as *Angitia*; Johnson, 1916a: p.21 as *Angitia*); Portnoo, {17} September {1918}, cliff, WFJ (NMI) (Johnson, 1919a: p. 37 as *Angitia*); DOWN: Dromore, August 1925, WFJ; Dundrum, July and {4} August 1926 (NMI), WFJ (both Johnson, 1927: p. 161 as *Angitia*. ♂♀); Greencastle, ♀ 26 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 141 as *Angitia*); Newcastle, ♂♂ 12 and 25 May, 5 and 23 September, 15 October, WFJ (Johnson, 1929: p. 137 as *Angitia*); Rostrevor, {16} June 1923 and 1925, {3} May

1926, WFJ (NMI) (Johnson, 1927: p. 161 as *Angitia*. ♂♀); Tullybrannigan, ♀ emerged 7 September 1958 from a larva of the diamond-back moth *Plutella maculipennis* (now *Plutella xylostella* (L.)) (Lepidoptera: Yponomeutidae) on cabbage *Brassica*, AWS (NMI) (det. JFP) (unpublished); Warrenpoint, ♂ 10 August {1928}, WFJ (Johnson, 1929: p. 137 as *Angitia*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Angitia*); MAYO: Louisburgh, ♀ 15 July {1910}, swept, CM (NMI) (Morley, 1911a: p. 15 as *Angitia*); WEXFORD: Kilmore, AB (Morley, 1915: p. 193 as *Angitia*).

Ireland (Azidah *et al*., 2000: p. 381 material examined).

***Diadegma grisescens* (Gravenhorst, 1829)**

synonym *Meloboris rufiventris* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, {7} July {1914}, in fields, WFJ (NMI); DONEGAL: Coolmore, {17} September {1913}, on roadside, WFJ (NMI) (Johnson, 1914a: p. 67 as *Meloboris rufiventris*); Portnoo, {19} June {1918}, WFJ (NMI) (Johnson, 1919a: p. 37 as *Meloboris rufiventris*); DOWN: Lough Shark, {13} August {1908}, WFJ (NMI) (Johnson, 1913: p. 141 as *Meloboris rufiventris*); Rostrevor, ♀ 23 July 1929, mill, WFJ (NMI) (Johnson, 1930: p. 157 as *Meloboris rufiventris*); MAYO: Carrowmore Lough, several, CM: Clare Island, not uncommon, CM; Louisburgh, several, CM (Morley, 1911a: p. 15 as *Meloboris rufiventris*; Morley, 1915: p. 171 as *Meloboris rufiventris*); WEXFORD: Kilmore, AB (Morley, 1915: p. 171 as *Meloboris rufiventris*).

***Diadegma holopygum* (Thomson, 1887)**

WICKLOW: Tonelagee Mountain (Mt.), 1860-1900ft, 22 July 1937, AWS and GMS (BMNH)

Ireland (Yu, 1998: CD-Rom).

***Diadegma hygrobium* (Thomson, 1887)**

synonym *Meloboris ischnocera* Thomson, 1887

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 161 as *Meloboris ischnocera*); ARMAGH: Poyntzpass, {30} September {1921}, caught by hand on

herbage, WFJ (NMI) (Johnson, 1922b: p. 69 as *Meloboris ischnocera*).

***Diadegma insectator* (Schrank, 1781)**

DONEGAL: Coolmore, 4 September 1915, on roadside, WFJ (NMI) (Johnson, 1917a: p. 40 as *Angitia*); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Angitia*).

***Diadegma laterale* (Gravenhorst, 1829)**

DUBLIN: Chapelizod, 10 May, Stanley Kemp (Morley, 1915: p. 194 as *Angitia*); WICKLOW: north of Knockananna, ♂♂ 17 June 1949, AWS (NMI) (det. AWS) (unpublished).

***Diadegma latungula* (Thomson, 1887)**

ARMAGH: Poyntzpass, {25} May {1907}, June and July, field, WFJ (NMI) (Johnson, 1913: p. 141 as *Pectenella*; Johnson, 1919a: p. 37 as *Pectenella*); DONEGAL: Portnoo, September, bog road and adult emerged in June from larvae of *Coleophora anatipennella* (Hübner) (Lepidoptera: Coleophoridae), WFJ (Johnson, 1919a: p.37 as *Pectenella*); DOWN: Dundrum, ♀ {19} June 1926, WFJ (NMI); Newcastle, ♀ {27} August 1926, WFJ (NMI) (Johnson, 1927: p.161 as *Pectenella*); Warrenpoint, ♀10 August, WFJ (Johnson, 1929: p.137 as *Pectenella*).

Ireland (Morley, 1915: p. 174 as *Pectenella*. By Rev. W. F. Johnson).

***Diadegma litorale* (Holmgren, 1856)**

DONEGAL: Coolmore, {1} September {1917}, at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1918: p. 109 as *Meloboris*).

***Diadegma majale* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, WFJ (Johnson, 1913: p. 141 as *Augitia*; Morley, 1915: p. 191 as *Angitia*); DONEGAL: Coolmore, on sandhills at thistles *Carduus*, WFJ (Johnson, 1915: p. 133 as *Augitia*); same locality, ♂♂, {16, 18, 23 and 29} September {1915}, in window, and flying among sallows *Salix*, WFJ (Johnson, 1916a: p. 21 as *Angitia*; Johnson, 1917a: p. 40 as *Angitia*); DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 161 as *Angitia*); Newcastle, ♂♂ 6 and 18 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia majalis*).

***Diadegma semiclausum* (Hellén, 1949)**

synonym *Diadegma eucerophaga* Horstmann, 1969

synonym *Angitia tibialis* misidentification

synonym *Angitia cerophaga* misidentification

ARMAGH: Poyntzpass, June, WFJ (Johnson, 1913: p. 141 as *Augitia tibialis*); same locality, {30} July {1914}, in window of house, WFJ (NMI) (Johnson, 1915: p. 133 as *Augitia tibialis*); DOWN: Murlough Ho. (House), 3 July 1957, dunes, AWS (as *cerophaga*) (NMI); Tullybrannigan, emerged 8 and 16 August and 4 September 1958 from a larva of the diamond-back moth *Plutella maculipennis* Curtis (now *Plutella xylostella* (Linnaeus)) (Diptera: Yponomeutidae), AWS (as *cerophaga*) (NMI) (both unpublished); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (Speight and Healy, 1977: p. 153 as *Angitia cerophaga*); MAYO: Achill Island, 4 June 1960, AWS (as *cerophaga*) (NMI) (unpublished); Clare Island, both sexes, July 1910, swept from herbage, CM (Morley, 1911a: p. 15 as *Angitia tibialis*; Morley, 1915: p. 198 as *Angitia tibialis*).

Ireland (Azidah *et al*., 2000: p. 388 materal examined).

***Diadegma stagnale* (Holmgren, 1856)** **New to Ireland**

WEXFORD: Curracloe, ♂ July 1937, AWS and GMS (BMNH) (det JFP).

***Diadegma tenuipes* (Thomson, 1887)**

DOWN: Greencastle, ♀ 26 August 1930, sandhills, WFJ (Johnson, 1931c: p. 141 as *Angitia*); Newcastle, ♂♀ 6-25 June, 12 August, 23 September, 8 and 15 October {1927}, WFJ (NMI); Rostrevor, ♂ ♀ 2-23 July {1927}, WFJ (NMI); LOUTH: ♂♀ Dundalk, ♂♀ 12 and 15 July, WFJ (all Johnson, 1929: p. 137 as *Angitia*).

***Diadegma tripunctatum* (Bridgman, 1886)**

ARMAGH: Poyntzpass hill, {24} July 1916, WFJ (NMI) (Johnson, 1917a: p. 40 as *Angitia*).

***Diadegma trochanteratum* (Thomson, 1887)**

DONEGAL: Tory Island, ♀ D. J. Sullivan (NMI) (det. RWC) (unpublished); DOWN: Newcastle, ♂ 25 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia*);

KERRY: near Fermoyle, ♀ 2 June 1946, AWS (NMI) (det. RWC) (unpublished).

***Diadegma truncatum* (Thomson, 1887)** **New to Ireland**

synonym *Diadegma subbuccata* (Thomson, 1887)

WICKLOW: Powerscourt Dpk (Deerpark), 1 September 1948, AWS (as *subbuccata*) (NMI).

***Dusona anceps* (Holmgren, 1860)**

DONEGAL: Portnoo, {19} June {1918}, among sallows *Salix* mostly on bog road, WFJ (NMI) (Johnson, 1919a: p. 37 as *Campoplex*); DOWN: Greencastle, ♂♀ 21 and 26 August 1930, roadside and field, WFJ (NMI) (Johnson, 1931c: p. 141 as *Campoplex*. *Teste* Dr Roman); LOUTH: Termonfeckin, ♀ July 1924, WFJ and Mrs Johnson (NMI) (Johnson, 1927: p. 160 as *Campoplex*).

***Dusona angustifrons* (Förster, 1868)**

synonym *Dusona zonella* (Förster, 1868)

DOWN: Newcastle, ♀ 6 September {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Campoplex zonella*).

***Dusona bicoloripes* (Ashmead, 1906)** **New to Ireland**

synonym *Dusona foersteri* (Roman, 1942)

CARLOW: Fenagh (NMI); KERRY: Cromaglaun (Mountain) (NMI); Muckross (Killarney) (NMI); ROSCOMMON: Mote Park (NMI) (all as *foersteri*).

***Dusona bucculenta* (Holmgren, 1860)**

DOWN: Newcastle, {7} August {1909}, WFJ (NMI) (Johnson, 1913: p. 141 as *Campoplexus*).

***Dusona carinifrons* (Holmgren, 1860)** **New to Ireland**

MAYO: Achill Sound, June 1910, WFJ (NMI).

***Dusona confusa* (Förster, 1868)**

DOWN: Newcastle, ♀♀ 17 and 29 September {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Campoplex*).

***Dusona contumax* (Förster, 1868)**

synonym *Dusona foveolatus* (Förster, 1868)

ARMAGH: Poyntzpass, on roadside and in field, ♂♂♀♀ {29} May {1920}, July and {12 and 28} August {1920}, on ragweed *Ambrosia* 8.30-9 pm, WFJ (NMI) (Johnson, 1921a: p. 107 as *Campoplex foveolatus*; Johnson, 1922b: p. 69 as *Campoplex foveolatus*); DOWN: Rostrevor, ♀ {9} June 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Dusona foveolatus*).

***Dusona disclusa* (Förster, 1868)**

DOWN: Newcastle, ♀ 9 September {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Campoplex disclosus*); WEXFORD: Kilmore, middle of August 1898, AB (Morley, 1915: p. 90 as *Campoplex disclosus*).

***Dusona erythrogaster* (Förster, 1868)**

ARMAGH: Poyntzpass, field and hill, {30} May {1919} and {4} June {1920}, WFJ (NMI) (Johnson, 1920a: p. 10 as *Campoplex*; Johnson, 1921a: p. 17 as *Campoplex*); LOUTH: Carlingford, {7} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Campoplex*).

***Dusona falcator* (Fabricius, 1775)**

ARMAGH: Poyntzpass, {2 and 10} August {1915}, in field, WFJ (NMI); DONEGAL: Coolmore, {16} September 1916, among sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 21 as *Campoplex*; Johnson, 1917a: p. 40 as *Campoplex*); KERRY: Mangerton Mountain, ♀ June 1905, JNH (Morley, 1911c: p. 20 as *Campoplex*; Anon., 1913: p. 43 as *Campoplex*); MAYO: Sraheens Lake, ♀ June 1910, WFJ (Morley, 1911a: p. 14 as *Campoplex*).

***Dusona incompleta* (Bridgman, 1889)**

DOWN: Rostrevor, ♀ 14 September 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 157 as *Campoplex*); LOUTH: Termonfeckin, ♀ {15} August 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Campoplex*).

***Dusona infesta* (Förster, 1868)** **New to Ireland**

DOWN: Newcastle, 17 September 1927, AWS (NMI); Rostrevor, 15 September 1929, road, WFJ (NMI).

***Dusona insignita* (Förster, 1868)** **New to Ireland**

DOWN: Newcastle, 31 May 1927, ♂♀ in cop., WFJ (NMI); Rostrevor, 7 August 1929, WFJ (NMI).

***Dusona juvenilis* (Förster, 1868)**

synonym *Dusona monozona* (Förster, 1868)

DONEGAL: Portnoo, June, among sallows *Salix* mostly on bog road, WFJ (Johnson, 1919a: p. 37 as *Campoplex monozonius*).

***Dusona leptogaster* (Holmgren, 1860)**

DONEGAL: Portnoo, {19} June {1918}, among sallows *Salix* mostly on bog road, WFJ (Johnson, 1919a: p. 37 as *Campoplex*).

***Dusona nidulator* (Fabricius, 1804)**

synonym *Dusona nitidulator* (Holmgren, 1856)

ARMAGH: Poyntzpass, {15} May {1920}, in garden, WFJ (Johnson, 1921a: p. 107 as *Campoplex nitidulator*); KERRY: Caragh Lake, ♀ 13 August 1901, JWY (Morley, 1915: p. 76 as *Campoplex nitidulator*).

***Dusona notabilis* (Förster, 1868)**

DOWN: Rostrevor, ♀ 4 July 1930, field opposite, WFJ (NMI) (Johnson, 1931a: p. 54 as *Campoplex*); LOUTH: Carlingford, ♂ 11 June 1921, WFJ (NMI) (det. AR) (unpublished).

***Dusona oxyacanthae* (Boie, 1855)**

DOWN: Newcastle, ♀♀ 24 May {1927} and 11 June {1927}, WFJ (NMI); Rostrevor, ♂ 4 June 1928, taken on mountain, RGA (NMI) (both Johnson, 1929: p. 137 as *Campoplex*).

***Dusona petiolator* (Fabricius, 1804)**

synonym *Dusona lapponica* (Holmgren, 1860)

DOWN: Newcastle, ♂ 7 August 1909, on sand-hills, WFJ (Johnson, 1912a: p. 79 as *Campoplex lapponica*).

***Dusona pugillator* (Linnaeus, 1758)**

KERRY: Glenbeigh, ♀ June 1902, Bouskell (Morley, 1915: p. 79 as *Campoplex*).

***Dusona rugifer* (Förster, 1868)**

DOWN: Newcastle, ♀ 16 September, WFJ (Johnson, 1929: p. 137 as *Campoplex*).

***Dusona stragifex* (Förster, 1868)** **New to Ireland**

synonym *Campoplex areolata* Brauns, 1895

DOWN: Newcastle, 13 June 1927, WFJ (as *areolata*) (NMI).

***Dusona tenuis* (Förster, 1868)**

synonym *Dusona anxia* (Förster, 1868)

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Campoplex anxius*); DOWN: Rostrevor, ♂ 25 June 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157 as *Campoplex*); MAYO: Louisburgh, ♂ 15 July 1910, CM (Morley, 1911a: p. 14 as *Campoplex*).

***Dusona terebrator* (Förster, 1868)**

ARMAGH: Poyntzpass, August, at hogweed *Heracleum*, WFJ; DONEGAL: Portnoo, {17} June {1918}, among sallows *Salix* mostly on bog road, WFJ (NMI) (both Johnson, 1919a: p. 37 as *Campoplex*); DOWN: Newcastle, July, JJK (Johnson, 1918: p. 109 as *Campoplex*); LOUTH: Carlingford, ♀ 1 June 1921, WFJ (NMI) (det. AR) (unpublished).

***Dusona vidua* (Gravenhorst, 1829)**

DONEGAL: Coolmore, {9} September {1915}, at Umbelliferae on the roadside, WFJ (NMI) (Johnson, 1916a: p. 21 as *Casinaria*).

***Enytus apostata* (Gravenhorst, 1829)**

synonym *Enytus exareolatus* (Ratzeburg, 1852)

synonym *Enytus reticulatus* (Bridgman, 1884)

DONEGAL: Portnoo, cliff and mountain road, {30} June {1920}, WFJ (det AR) (Johnson, 1920a: p. 10 as *Angitia*; Johnson, 1921a: p. 107 as *Angitia exaraleolata*); DOWN: Warrenpoint, ♀ 3 July, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia exaraleolata*); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (Speight and Healy, 1977: p. 153 as *Angitia exareolata* (Grav.)).

***Enytus neoapostata* (Horstmann, 1969)** **New to Ireland**

DUBLIN: Glenasmole, ♀ September 1937, AWS (BMNH).

***Gonotypus melanostoma* (Thomson, 1887)** **New to Ireland**

KILDARE: South of Athy, ♀ 24 September 1933, AWS (NMI) (det. RWC); WICKLOW: South of Bray head, ♀ 16 September 1954, AWS (NMI) (det. RWC).

***Hyposoter alienus* (Brischke, 1880)**

DOWN: Newcastle, ♂♂ 26 May and 25 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Anilasta*).

***Hyposoter brischkei* (Bridgman, 1882)**

synonym *Hyposoter boops* (Thomson, 1887)

DOWN: Newcastle, ♂ 7 May {1927}, ♀ 8 October {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Anilasta boops*).

***Hyposoter didymator* (Thunberg, 1824)**

synonym *Hyposoter ruficinctus* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, {24} May {1921}, roadside, WFJ (NMI) (Johnson, 1922b: p. 69 as *Anilasta ruficincta*); DOWN: Newcastle, {26} August 1926, WFJ (NMI); Rostrevor, {17} June 1924, WFJ (NMI) (both Johnson, 1927: p. 161 as *Anilasta ruficincta*. ♂♀); same locality, ♂ 7 June 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157 as *Anilasta ruficincta*); LOUTH: Carlingford, {2 and 3} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Anilasts ruficincta*).

***Hyposoter discedens* (Schmiedeknecht, 1909)**

DOWN: Dundrum, ♂ June 1926, WFJ (NMI) (Johnson, 1927: p. 161 as *Anilasta*, *teste* Roman); Rostrevor, ♂ 4 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Anilasta*).

***Hyposoter notatus* (Gravenhorst, 1829)**

DOWN: Newcastle, ♂ 25 May, WFJ (Johnson, 1929: p. 137 as *Anilasta*).

***Hyposoter placidus* (Desvignes, 1856)** **New to Ireland**

ARMAGH: Poyntzpass, 18 May 1914 and 5 August 1919, WFJ.

***Hyposoter rhodocerae* (Rondani, 1877)** **New to Ireland**

synonym *Hyposoter ebeninus* (Gravenhorst, 1829)

KILDARE: Athy, emerged 18 June 1940 from a larva of the dark tussock

(*Dicallomera fascelina* (L.)) (Lepidoptera: Lymantriidae) collected in May 1940, Rev. K. M. Dunlop (NMI) (det AWS as *ebeninus*).

***Hyposoter thuringiacus* (Schmiedeknecht, 1909)**

DOWN: Newcastle, ♀ 16 September {1927}, WFJ (NMI) (Johnson, 1929: p. 13 as *Anilasta*).

***Hyposoter tricinctus* (Holmgren, 1858)**

DOWN: Newcastle, ♂♂ 6 May, 13, 18 and 27 June, WFJ (Johnson, 1929: p. 137 as *Anilasta*).

***Lathrostizus lugens* (Gravenhorst, 1829)**

synonym *Lathrostizus vestigialis* (Ratzeburg, 1852)

ARMAGH: Poyntzpass, {26} June {1907}, WFJ; DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 141 as *Augitia* (mispelling) *vestigialis*); DOWN: Rostrevor, ♀ 8 July 1930, garden, ♀ 9 July 1930, field opposite, WFJ (NMI) (Johnson, 1931a: p. 54 as *Angitia vestigialis*); MAYO: Louisburgh, ♂ 15 July, swept, CM (Morley, 1911a: p. 15 as *Angitia vestigialis*).

Ireland (Morley, 1915: p. 200 as *Angitia*. Johnson).

[***Macrus parvula* (Gravenhorst, 1829)**

MAYO: Clare island, several of both sexes July, CM (Morley, 1911a: p. 15 as *Angitia*; Morley, 1915: p. 179 as *Angitia*. My Clare Island reference...is an error).]

***Meloboris alternans* (Gravenhorst, 1829)**

DOWN: Newcastle, ♂ 6 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Angitia*).

****Meloboris collector* (Thunberg, 1824)** **New to Ireland**

WICKLOW: Liffey Head, ♀♀ 11 June 1933, JFP (BMNH).

****Meloboris gracilis* Holmgren, 1859** **New to Ireland**

DUBLIN: Glenasmole, ♀ September 1937, AWS (BMNH); Phoenix Park, ♀ 26 September 1937, AWS (BMNH).

***Nemeritis macrocentra* (Gravenhorst, 1829)**

synonym *Nemeritis sordidus* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, {28} July {1917}, in fields, WFJ (NMI) (Johnson, 1918: p.

19 as *Nemeritis sordida*).

***Nepiesta mandibularis* (Holmgren, 1860)** **New to Ireland**

KILKENNY: railway and quarry near railway junction south of Kilkenny, ♀ 1 May 1936, AWS (NMI) (det. Horstmann).

***Olesicampe alboplica* (Thomson, 1887)**

synonym *Olesicampe simplex* (Thomson, 1887)

ARMAGH: Poyntzpass hill, ♂♂♀♀ {30} May {1919}, WFJ (NMI) (Johnson, 1920a: p. 10 as *Olesicampe simplex*).

***Olesicampe buccata* (Thomson, 1887)**

DOWN: Newcastle, ♂ 18 May {1927}, ♀ 13 June {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Holocremna*).

***Olesicampe clandestina* (Holmgren, 1860)**

ARMAGH: Poyntzpass, {10} August {1921}, window, WFJ (NMI) (Johnson, 1922b: p. 69 as *Holocremna*).

***Olesicampe crassitarsis* (Thomson, 1887)**

DOWN: Warrenpoint, ♂ 2 {3} August, WFJ (NMI) (Johnson, 1929: p. 137).

***Olesicampe erythropyga* (Holmgren, 1860)**

ARMAGH: Poyntzpass, ♀♀ {1 and 30} May {1918} (det. AR) and June, emerged from the sawfly *Pteronus pavidus* Lep. (now *Nematus* (*Pteronidea*) *pavidus* Serville) (Hymenoptera: Tenthredinidae), WFJ (NMI) (Johnson, 1920a: p. 10 as *Holocremna*); same locality, {5} September {1921}, field, WFJ (Johnson, 1922b: p. 69 as *Holocremna*).

***Olesicampe fulcrans* (Thomson, 1887)**

DOWN: Rostrevor, ♂ 6 June 1925, WFJ (NMI) (Johnson, 1927: p. 161 *teste* Roman).

***Olesicampe fulviventris* (Gmelin, 1790)**

ARMAGH: Poyntzpass, field, May and {24} June {1920}, WFJ (NMI) (Johnson, 1921a: p. 107); DOWN: Greencastle, ♀ 21 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 141); Rostrevor, ♂ {3} June 1924, WFJ (NMI) (Johnson, 1927: p. 161); LOUTH: Carlingford, {13} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17);

MAYO: Carrowmore, Lough, CM; Darby's Point, a pair, WFJ (NMI); Lough Namucka, JNH; Louisburgh, CM (Morley, 1911a: p. 15; Morley, 1915: p. 165 first and last sites are mentioned).

***Olesicampe geniculella* (Thomson, 1887)** **New to Ireland**

DOWN: Greencastle, 4 August 1930, WFJ (NMI).

***Olesicampe gracilipes* (Thomson, 1887)** **New to Ireland**

WEXFORD: Killurin (Kilburin), ♀ 26 July 1937, AWS and GMS (BMNH) (det JFP).

***Olesicampe incrassator* (Holmgren, 1856)**

DOWN: Rostrevor, ♀ {16} June 1924, WFJ (NMI) (Johnson, 1927: p. 161 as *Holocremna*).

***Olesicampe longipes* (Müller, 1776)**

ARMAGH: Poyntzpass, June, WFJ (Johnson, 1913: p. 141; Morley, 1915: p. 166); DOWN: Rostrevor, Victoria Square, ♀♀ 20 and 28 August 1929, WFJ (NMI) (Johnson, 1930: p. 157); MAYO: Clare island, single pair July, swept, CM (Morley, 1911a: p. 15; Morley, 1915: p. 166).

***Olesicampe paludicola* (Holmgren, 1860)**

Ireland (Broad, 2006).

***Olesicampe patellana* (Thomson, 1887)** **New to Ireland**

MAYO: Dooaghtry, 1 September 1941, AWS (NMI); WICKLOW: Connary, 27 August 1939, AWS (NMI).

***Olesicampe praecox* (Holmgren, 1860)**

DOWN: Greencastle, ♂♀ 20 August 1930, on the roadside at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1931c: p. 139).

***Olesicampe proterva* (Brischke, 1880)**

synonym *Olesicampe luteipes* (Thomson, 1887)

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 161 as *Olesicampe luteipes*).

***Olesicampe pubescens* (Ratzeburg, 1844)**

synonym *Olesicampe hyalinata* (Holmgren, 1860)

DOWN: Newcastle, ♀ 17 September {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Holocremna hyalinata*).

***Olesicampe sericea* (Holmgren, 1856)**

ARMAGH: Poyntzpass, {21} August 1916, in field, WFJ (Johnson, 1917a: p. 40).

***Phobocampe confusa* Thomson, 1887**

ARMAGH: ♂ 24 May 1920, WFJ (NMI) (det. AR) (unpublished); DUBLIN: St Columba's College, ♂ 23 April 1925 and ♀ 1 May 1925, bred from cocoons ex the small tortoiseshell *Vanessa urtica* (now *Aglais urticae* (L.) (Lepidoptera: Nymphalidae)), AMG; WICKLOW: Devil's Glen, ♂ 28 March 1927, ♀ 18 April 1927 and ♀ 29 April 1927, bred from cocoons on nettles *Urtica*, AWS (Stelfox, 1929b: pp 66-67 as *Phobocampa*).

***Porizon transfuga* (Gravenhorst, 1829)** **New to Ireland**

ANTRIM: Murlough Bay, ♂ 7 June 1938, AWS (NMI) (det. Horstmann, det. RWC as *Venturia*); DOWN: Donard Lodge, ♀ 18 June 1957 and ♀ 4 July 1965, AWS (NMI); Tollymore Park, ♀ 12 June 1961, AWS (NMI); KILDARE: Kilkea Park, ♂♀ 4 July 1937, AWS (NMI); MEATH: Rahinstown, ♂ 3 October 1937, AWS (NMI); WICKLOW: Devil's Glen, ♀ 18 June 1950, AWS (NMI); Glending Wood, ♂ 9 October 1946, AWS (NMI) (all det. RWC as *Venturia*).

***Pyracmon fumipennis* (Zetterstedt, 1838)** **New to Ireland**

DUBLIN: Glenasmole, 25 May 1938, AWS (NMI).

***Rhimphoctona* (*Xylophylax*) *obscuripes* (Holmgren, 1860)**

ARMAGH: Poyntzpass, {27} July {1917}, in fields, WFJ (NMI) (Johnson, 1918: p. 109 as *Pyracmon*).

***Scirtetes robustus* (Woldstedt, 1877)**

synonym *Spudastica kriechbaumeri* (Bridgman, 1882)

DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 161 as *Tranosema*); WICKLOW: Powerscourt, 30 May 1926, AWS (as *kriechbaumeri*) (NMI).

***Sinophorus alienatus* (Gravenhorst, 1829)**

MAYO: Carrowmore Lough, ♀ 18 July, CM (Morley, 1911a: p. 14 as *Limnerium*).

***Sinophorus costalis* (Thomson, 1887)**

DOWN: Rostrevor, ♀ 23 July 1929, mill, WFJ (NMI) (Johnson, 1930: p. 157 as *Eulimneria*).

***Sinophorus crassifemur* (Thomson, 1887)** **New to Ireland**

DOWN: Tollymore Park, 9 June 1962, AWS (NMI); TIPPERARY: B'c't'y (Ballinacourty), 10 June 1945, AWS (NMI); Galtymore, 29 May 1944, 3000ft, AWS (NMI); WICKLOW: Glenmalur, 30 May 1940, AWS (NMI); Kippure Ho (House), 20 June 1948, AWS (NMI).

***Sinophorus geniculatus* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Rostrevor, 17 July 1931, WFJ (NMI); MAYO: Polranny, Achill Sound, June 1910, WFJ (NMI).

***Sinophorus juniperinus* (Holmgren, 1856)**

ANTRIM: Belfast, June, HLO; Cave Hill, June, HLO (NMI) (Johnson, 1913: p. 141 as *Limnerium*); Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 161 as *Limnerium*); ARMAGH: Poyntzpass, May, {12 and 14} July {1920 and 1921} (NMI), field, at hogweed *Heracleum*, WFJ (Johnson, 1915: p. 133 as *Limnerium*; Johnson, 1919a: p. 37 as *Limnerium*; Johnson, 1922b: p. 69 as *Limnerium*, var. *juniperinum* Holmgren); same locality, 2♀♀ emerged on 12 July from the orchard ermine *Hyponomeuta padellus* (now *Yponomeuta padella* (L.) (Lepidoptera: Yponomeutidae)), WFJ (Johnson, 1921a: p. 107 as *Limnerium*); DONEGAL: Coolmore, {17 and 25} September {1915}, WFJ (Johnson, 1919a: p. 37 as *Limnerium*); Portnoo, June, sandhills, WFJ (Johnson, 1920a: p. 10 as *Limnerium*); KERRY: Rossbeigh, June 1902, Bouskell (Morley, 1915: p. 115 as *Limnerium*); LOUTH: Termonfeckin, ♀ {28} August 1924, WFJ (NMI) (Johnson, 1927: p. 161 as *Limnerium*); WATERFORD: Cappoquin, Dungarvan, ♀ 15 August 1928, AWS (NMI) (det. RWC as *Sinophorus juniperinrus*) (unpublished).

***Sinophorus turionum* (Ratzeburg, 1844)**

synonym *Sinophorus rufifemur* (Thomson, 1887)

ARMAGH: Poyntzpass, {26 27} July {1918} and {3} August {1918}, in fields, WFJ (NMI) (Johnson, 1918: p. 109 as *Limnerium rufifemur*; Johnson, 1919a: p. 37 as *Limnerium rufifemur*); DONEGAL: Portnoo, cliff, {17} September {1916}, WFJ (NMI) (Johnson, 1920a: p. 10 as *Limnerium rufifemur*); DOWN: Greencastle, ♀ 18 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 141 as *Eulimneria rufifemur*); Newcastle, ♀ 6 September {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Limnerium rufifemur*); LOUTH: Termonfeckin, ♀ {25} August 1924, WFJ (NMI) (Johnson, 1927: p. 161 as *Limnerium rufifemur*).

***Sinophorus xanthostomus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {18} May {1921}, June, {21} July {1920} and {2, 12 and 28} August {1917 and 1920}, on hill, in field, garden on grass, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1920a: p. 10 as *Limnerium*; Johnson, 1921a: p. 107 as *Limnerium*; Johnson, 1922b: p. 69 as *Limnerium*); DONEGAL: Portnoo, {6} June {1919}, shore, WFJ (Johnson, 1920a: p. 10 as *Limnerium*); DOWN: Rostrevor, ♀♀ 2 and 5 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Limnerium*); LOUTH: Termonfeckin, ♂ {8} August 1924, WFJ (Johnson, 1927: p. 161 as *Limnerium*).

***Tranosemella praerogator* (Linnaeus, 1758)**

synonym *Tranosemella interrupta* (Holmgren, 1860)

ARMAGH: Poyntzpass, May, June and July, in fields, WFJ; same locality, a ♀ emerged 16 August from a pupa on a leaf of forget-me-not *Myosotis*, WFJ (Johnson, 1919a: p. 37 as *Angitia interrupta*); DONEGAL: Coolmore, September 1916, among herbage, WFJ (Johnson, 1917a: p. 40 as *Angitia interrupta*); Portnoo, September, roadside, WFJ (Johnson, 1919a: p. 37 as *Angitia interrupta*); DOWN: Dundrum, ♂ June and July 1926, WFJ (Johnson, 1927: p. 161 as *Angitia interrupta*); Newcastle, ♂ 7 May, WFJ (Johnson, 1929: p. 137 as *Angitia interrupta*); Tollymore Park, ♀ 27 August 1961, AWS (NMI) (det. AWS as *interrupta*) (unpublished).

***Venturia canescens* (Gravenhorst, 1829)**

NO COUNTY: Belfast, bakery, 2♀♀ 20 December 1946, K. F. Salmond; warehouse of flour mill, 3♀♀ 22-3 August 1945, P. M. Butler; ARMAGH: Portadown, in bakery,

4♀♀ 19 May 1944, with much the Mediterranean flour moth *Ephestia kühniella* Zeller (Lepidoptera: Pyralidae), A. O'Farrell (all Richards, 1949: p. 30 as *Nemeritis*); DUBLIN: Lucan, flour mills, ♀♀ bred August 1932 from the Mediterranean flour moth *Ephestia kühniella*, P. Roche (NMI) (det. AWS) (unpublished).

CREMASTINAE

Thirteen species, representing only four of the twenty-four known genera occur in the British Isles, where many of the species seem to be associated with warmer, drier habitats; heaths and coastal sand dunes. This moderately large subfamily, with over 650 species, is most abundant in the semi-arid tropics. Cremastines are most likely to be confused with campoplegines but can be distinguished easily by the form of the face and clypeus and the fine, longitudinal, aciculate sculpture on the second metasomal tergite.

Larval cremastines are solitary internal koinobiont parasites of lepidopterous larvae, mainly those living in concealed situations, such as leaf rolls, flower heads and tunnels and mines in plant parts. Oviposition is often into a relatively immature host larva and the egg is deposited free in the haemocoel. The host larva is killed at about the time of pupation and the fully-grown parasite larva emerges to spin its cocoon adjacent to the host remains. As with most ichneumonids the pupal stage is very short. Cremastines usually overwinter as a first instar larva within a host.

***Cremastus geminus* Gravenhorst, 1829**

DUBLIN: Portmarnock, ♀ 3 September 1949, AWS (NMI) (det. AWS and conf. JPOC); Portrane, ♂ 2 September 1928, AWS (NMI) (det. AWS and conf. JPOC) (both unpublished); WEXFORD: Kilmore, 13-27 August 1898, long series, AB (Morley, 1915: p. 57); Curraghcloe (Curracloe), ♀ 29 June 1930, ♀ 17 July 1937, AWS (NMI) (det. AWS and conf. JPOC); The Raven, ♀ 4 June 1986, swept amongst conifers on sand-dunes, JPOC (NMI) (det. JPOC); WICKLOW: Arklow District, ♀ 4 August 1925, AWS (NMI) (det. AWS and conf. JPOC); Brittas Bay, ♂ 31 July 1930, AWS (NMI) (det. AWS and conf. JPOC); Murrough, ♀ 18 September 1949, AWS

(NMI) (det. AWS and conf. JPOC) (all unpublished).

Ireland (Fitton and Gauld, 1980: p. 69).

***Cremastus infirmus* Gravenhorst, 1829**

DOWN: Murlough House (Ho), 19 June and 3 July 1957, dunes, AWS (NMI); Murlough NNR, ♀ 23 August 1973, dune slacks AGI (UM) (det. JPB and *fide* MGF); KILDARE: Landenstown: 6 August 1930, AWS (NMI) (all unpublished).

Ireland (Fitton and Gauld, 1980: p. 67).

***Cremastus spectator* Gravenhorst, 1829**

DONEGAL: Coolmore, {17 and 226} September {1913 and 1915}, on wing at sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 21); KERRY: Sybil Head, Dingle neighbourhood, July 1854, A. R. Hogan and AHH (Hogan and Haliday, 1855: p. 51); MAYO: Clare Island, 2♀♀ September 1910, WFJ (NMI) (Morley, 1915: p. 58 recorded by me under the name *C. albipennis*, Zett.); SLIGO: Classibaun Wood, ♀ 11 October 1946, RCF (NMI) (det. JPOC) (unpublished).

Ireland (Fitton and Gauld, 1980: p. 68).

***Pristomerus vulnerator* (Panzer, 1799)** **New to Ireland**

WICKLOW: Meeting of the Waters, ♀ 29 July 1943, AWS, swept off hazel *Corylus avellana*, AWS (NMI) (det. AWS and conf. JPOC).

[*Temelucha albipennis* (Zetterstedt 1838)

MAYO: Clare Island, 2♀♀ September 1910, WFJ (Morley, 1911a: p. 15 as *Cremastus albipennis*; Morley, 1915: p. 58 (this should be *Crematus spectator*).]

***Temelucha arenosa* (Szépligeti, 1899)** **New to Ireland**

DUBLIN: Rogerstown, ♂ 29 July 1943, AWS (NMI) (det. JPOC).

***Temelucha signata* (Holmgren, 1860)** **New to Ireland**

CORK: Ballycotton Bay, ♂ 24 August 1976, margin of brackish ditch on dune slack RA (UM) (det. JPB and *fide* MGF).

CRYPTINAE

This is the largest subfamily of the Ichneumonidae, with over 4,500 described

species. It has been one of the five traditional divisions of the family. Until recently the correct name was in dispute and it will be found referred to as Phygadeuontinae or Gelinae in much recent literature. The host associations of the subfamily cover a greater taxonomic range than the rest of the family together and numbers of species occur in every type of terrestrial habitat. More than 450 species representing over 80 genera are currently recorded from the British Isles.

The majority of species are easily recognized as belonging to the subfamily although some of the medium- and larger-sized species might be confused with the Ichneumoninae. More recognition problems are likely to arise with some small species, especially the males, which tend to have a rather non-descript appearance. Although the limits of this subfamily have remained rather stable, its tribal and generic classification has undergone, and is still undergoing, considerable change.

Like the other large subfamily of idiobiont ectoparasitoids, the Pimplinae, the Cryptinae has a very wide host range. However, cryptines show marked host-specificity, in contrast to the niche-specificity of pimplines. Like koinobiont endoparasitoid ichneumonids, individual species often have very narrow host ranges but, unlike them, this seems to be the culmination of a process of morphological rather than physiological, adaptation. Relatively few species function as facultative hyperparasites and the kind of hyperparasitism which occurs most widely in the Cryptinae is pseudohyperparasitism.

Although the vast majority of species are idiobiont ectoparasitoids, there have been changes in a few lineages. The genera of the subtribe Stilpnina, seem to be koinobiont endoparasitoids of Diptera, ovipositing into the larva (see below). Larvae of *Blapsidotes vicinus* develop endophagously in gregarious broods in the naked pupae of butterflies and some species of *Goryphus* and *Cryptus* appear to be endophagous in lepidopterous pupae. The typical strategy, however, is to attack a host in a protected situation, most often a prepupa or pupa in a cocoon, but sometimes larvae in similar structures and hosts in other concealed situations. For example, many species of *Phygadeuon* are ectoparasites of the pupae of Diptera within puparia and various

genera of Cryptini attack nests of bees and wasps. In such nests the larva of at least one species of *Aritranis* is known to consume the contents of more than one cell during its development. A few genera are parasites in the nests of social wasps (Vespidae). One such species, *Sphecophaga vesparum* (Curtis), is a gregarious parasite on the pupae of Vespinae and has been used in attempts to control perennial colonies of social wasps in New Zealand. Spider egg sacs serve as 'hosts' for the species of a number of genera, some of which are composed entirely of such species (for example, *Trychosis*, *Hemiteles*), while others belong to genera which attack a range of cocoon-like structures (for example, *Gelis*, *Bathythrix*). Although the use of spider egg cocoons as hosts seems to have evolved several times, only one ichneumonid, the african phygadeuontine *Sozites kerichoensis* Kerrich, is known to attack the egg masses of an insect - those of the weevil *Entypotrachelus meyeri* Kolbe (Coleoptera: Curculionidae). The genus *Obisiphaga* is exceptional in that it utilizes the egg nests of a pseudoscorpion.

The biology of the genera comprising the subtribe Stilpnina is atypical, but of particular interest because probably all species are koinobiont endoparasitoids. The most reliable and complete account relates to an unidentified species of *Mesoleptus* parasitising *Sarcophaga nigriventris* Meigen (Diptera: Sarcophagidae) feeding in dead snails (*Cepaea nemoralis* (Linnaeus)). The female *Mesoleptus* searches for and detects the larvae of the fly by probing the decaying body of the snail with her ovipositor. The antennae are not used at this stage and neither are the tarsi important, as females were frequently observed to stand on a host without apparently detecting it. The larva may attempt to escape parasitisation by wriggling movements when touched by the ovipositor, and its thick cuticle is not easily pierced. Fairly mature fly larvae are used for oviposition and they continue to develop normally and to form a puparium (which is of a similar size to those formed by unparasitised larvae). The parasite larva pupates within the host puparium and the adult *Mesoleptus* escapes by biting its way out at the anterior end. The species is always a solitary parasite. Another interesting fact is that this particular *Mesoleptus* species does not attack two other species of *Sarcophaga*

found in the dead *C. nemoralis*, even when they were present in the same snail as *S. nigriventris*.

Cryptini

***Acroricnus stylator* (Thunberg, 1824)**

synonym *Acroricnus macrobatus* (Gravenhorst, 1829)

CLARE: Poulsallagh, ♀ 8 July 1927, AWS (NMI) (det. AWS as *Acroricnus macrobatus*) (Stelfox, 1927: p. 324 as *Acroricnus macrobatus*. I have several times taken the ichneumon...in places where this wasp [*Ancistrocerus pictus* Curtis] nested.); GALWAY: Furnace (Foirnis) Island, Lettermullan, ♂♀ 17 July 1997, from *Ancistrocerus scoticus* (Curtis) (Hymenoptera: Eumenidae) nest on a rock face in a field across the road, COR (det. MRS) (NMI) (unpublished); also ♂ emerged 12 July 2001 and ♂ emerged 15 July 2001, COR (Ronayne and O'Connor, 2006: pp 38-39); KERRY (V.C. H2): Dingle, ♀ 5 July 1977, C. P. J. Ash (RSM) (Schwarz and Shaw, 1998: p. 124); WATERFORD: Stradbally, ♀ 22-30 June 1907, HWA (Morley, 1908b: p. 276 as *Acroricnus macrobatus*. One very small specimen of only 10mm in length; Morley, 1914: p. 171 as *Acroricnus macrobatus*); WICKLOW: Rathdrum, ♀ 8 July 1927, AWS (NMI) (det. AWS as *Acroricnus macrobatus*) (unpublished).

Ireland (Yu, 1998: CD-Rom).

***Agrothereutes abbreviatus* (Fabricius, 1794)**

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Spilocryptus abbreviator*); ARMAGH: Poyntzpass, August and September 1916, in field and on roadside, WFJ (NMI) (Johnson, 1917a: p. 38 as *Spilocryptus abbreviator*; Johnson, 1921a: p. 106 as *Spilocryptus abbreviator* var. *hopei* Gravenhorst); CAVAN (V.C. H30): no locality (RSM) (Schwarz and Shaw, 1998: p. 109 as f. *incubitor* (Gravenhorst, 1829); DONEGAL: Coolmore, ♂ {28 September 1916}, among sallows *Salix*, WFJ (NMI) (Johnson, 1915: p. 131 as *Spilocryptus abbreviator*); same locality, ♀ September 1916, roadside, WFJ (Johnson, 1917a: p. 38 var. *hopei*); Portnoo, ♀ September 1917, among herbage on roadside, WFJ (NMI) (Johnson, 1918: p. 108 as *Spilocryptus abbreviator*); same locality, September, cliff, WFJ (Johnson,

1919a: p.36 as *Spilocryptus abbreviator* var. *hopei* Gravenhorst); DOWN: Rostrevor, ♂ 23 July, WFJ (Johnson, 1929 as *Spilocryptus abbreviator*); same locality, ♂ 7 August 1929, field opposite, WFJ (Johnson, 1930: p. 157 as *Spilocryptus abbreviator*); MAYO: Clare Island, ♀ September 1910, WFJ (Morley, 1911a: p. 11 as *Spilocryptus abbreviator*).

***Agrothereutes adustus* (Gravenhorst, 1829)**

synonym *Spilocryptus nubeculatus* (Gravenhorst, 1829)

DOWN: Newcastle, ♀ July, JJK (Johnson, 1918: p. 108 as *Spilocryptus nubeculatus*); Rostrevor, ♀ 9 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Spilocryptus nubeculatus*).

***Agrothereutes leucorhaeus* (Donovan, 1810)**

synonym *Agrothereutes tibialis* (Thomson, 1873)

DOWN: Rostrevor, ♀ 27 July 1929, grass plot, WFJ (NMI) (Johnson, 1930: p. 157 as *Spilocryptus tibialis*).

****Agrothereutes mandator* (Linnaeus, 1758)** **New to Ireland**

synonym *Spilocryptus cimbicis* (Tschek, 1871)

WICKLOW: Prince William's Seat, ♂♂♀♀ emerged June 1927 from a cocoon of the emperor moth *Saturnia pavonia* (L.) (Lepidoptera: Saturniidae) collected in January 1927, WFJ Collection (NMI) (det. AR as *Spilocryptus cimbicis*).

[*Agrothereutes mansuetor* (Tschek, 1871)

ARMAGH: Poyntzpass, ♀ June, in garden, WFJ (Johnson, 1918: p. 108 as *Spilocryptus*).

The specimen is actually *Pycnocryptus director* (now *Aritranis*) (Johnson, 1919a: p. 34 as *Pycnocryptus peregrinator*).]

***Agrothereutes saturniae* (Boie, 1855)**

ANTRIM/DOWN: Belfast, 2♂♂2♀♀ June 1927, D. J. Carpenter (Nicholson, 1933: p. 109 as *Spilocryptus*).

***Aritranis director* (Thunberg, 1824)**

synonym *Aritranis peregrinator* misidentified

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Pycnocryptus peregrinator*. ♂♀); ARMAGH: Poyntzpass hill, June, WFJ (Johnson, 1914a: p. 65 as *Pycnocryptus peregrinator*); Poyntzpass, ♀ June, in garden, WFJ (NMI) (Johnson, 1918: p. 108 as *Spilocryptus mansuetor*; Johnson, 1919a: p. 34 the record of *S. mansuetor* corrected to *P. peregrinator*); same locality, June and July, fields, WFJ (Johnson, 1919a: p. 36 as *Pycnocryptus peregrinator*); DONEGAL: Portnoo shore, {10} June {1919}, WFJ (NMI) (Johnson, 1920a: p. 9 as *Pycnocryptus peregrinator*... and var. *analis* Gravenhorst); DOWN: Dundrum, June 1926, WFJ (Johnson, 1927: p. 159 as *Pycnocryptus peregrinator*. ♂♀); Newcastle, ♂ August, JJK (Johnson, 1918: p. 108 as *Pycnocryptus peregrinator* var. *analis* Gravenhorst); same locality, ♂ 5 September, WFJ (Johnson, 1929: p. 136 as *Pycnocryptus peregrinator*); Rostrevor, May and June 1923, WFJ (NMI); same locality, ♂ June 1924, var. *analis* Gravenhorst, WFJ (both Johnson, 1927: p. 159 as *Pycnocryptus peregrinator*. ♂♀); Warrenpoint, ♂ 13 September, WFJ (Johnson, 1929: p. 136 as *Pycnocryptus peregrinator*); KERRY: no locality, ♀♀ (Morley, 1907a: p. 269 as *Pycnocryptus peregrinator*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Pycnocryptus peregrinator* and var. *analis* Gravenhorst); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 159 as *Pycnocryptus peregrinator*); MAYO: Achill Sound, ♂ {June 1910}, WFJ (NMI); Clare Island, ♀ {July 1910}, CM (NMI) (Morley, 1911a: p. 11 as *Pycnocryptus peregrinator* Linnaeus).

***Buathra tarsoleucos* (Schrank, 1781)**

GALWAY: Ross, ♂ September 1905, JNH (Morley, 1911c: p. 20 as *Cryptus*; Anon., 1913: p. 43 as *Cryptus*); KILDARE: ♂ 5 May 1940, AWS (NMI) (det. AWS) (unpublished).

***Cryptus armator* Fabricius, 1804**

synonym *Cryptus albatorius* misidentified

ANTRIM: Belfast, June 1909, HLO (NMI) (Johnson, 1915: p. 131 as *Cryptus albatorius*); ARMAGH: Poyntzpas, field, May, WFJ (Johnson, 1921a: p. 106 as *Cryptus albatorius* var. *titubator* Thunberg; LOUTH: Carlingford, June 1921, WFJ

(Johnson, 1922a: p. 17 as *Cryptus albatorius* var. *titubator*); Termonfeckin, ♀♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 159 as *Cryptus albatorius teste* Roman, also var. *titubator* (*infumatus* Thomson)).

***Cryptus dianae* Gravenhorst, 1829**

ARMAGH: Poyntzpass, August 1916, in fields, WFJ (Johnson, 1917a: p. 39); Poyntzpass hill, May, WFJ (NMI) (Johnson, 1920a: p. 9); DONEGAL: Portnoo shore, {18} June {1919}, WFJ (NMI) (Johnson, 1920a: p. 9); DOWN: Dundrum, ♂ June 1926, WFJ (NMI) (Johnson, 1927: p. 159); Rostrevor, ♂ 9 July 1930, field opposite, WFJ (NMI) (Johnson, 1931a: p. 54).

***Cryptus fibulatus* Gravenhorst, 1829**

CARLOW: Kilcarry, ♂ 14 August 1930, AWS (NMI) (det. AWS) (unpublished); DONEGAL (V.C. H34): Bundoran, ♀ 30 September 1946, RCF (RSM) (Schwarz and Shaw, 1998: p. 120); WICKLOW: The Murrough, ♀ 19 September 1926, AWS (NMI) (det. AWS) (unpublished).

***Cryptus inculcator* (Linnaeus, 1758)**

synonym *Cryptus sponsor* (Fabricius, 1793)

ANTRIM: Cave Hill, near Belfast, HLO (NMI) (Johnson, 1913: p. 139).

***Cryptus minator* Gravenhorst, 1829**

ARMAGH: Poyntzpass, {22} July {1912}, in one of my fields, WFJ (NMI) (Johnson, 1913: p. 139); DONEGAL: Coolmore, August 1917, among sallows *Salix*, WFJ (NMI) (Johnson, 1918: p. 108).

***Cryptus moschator* (Fabricius, 1787)**

DOWN: Dromore, ♂♀ August 1925, many at gooseberry *Ribes* bushes, WFJ (NMI) (Johnson, 1927: p. 159); Rostrevor, ♂ 13 July 1929, grass plot, ♂ 23 July 1929, mill, WFJ (NMI); same locality, Victoria Square, ♂ 6 September 1929, WFJ (all Johnson, 1930: p. 157).

***Cryptus spinosus* Gravenhorst, 1829** **New to Ireland**

MAYO: Mulranny, 13 July 1889 (NMI).

***Cryptus titubator* (Gravenhorst, 1822)**

DONEGAL: Portnoo, ♂ June, among sallows *Salix* on the roadside, WFJ (NMI) (Johnson, 1920b: p. 19); DOWN: Greencastle, ♀ 21 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140).

***Cryptus tuberculatus* Gravenhorst, 1829**

ARMAGH: Poyntzpass, ♀ July 1906, WFJ (NMI) (Morley, 1907b: p. 160; Johnson, 1912a: p. 78).

***Cryptus viduatorius* Fabricius, 1804**

DOWN: Greencastle, ♀♀ 5 and 6 August 1930, shore near pier, WFJ (NMI) (Johnson, 1931c: p. 140); Newcastle, August, JJK (Johnson, 1918: p. 108); LOUTH: Termonfeckin, ♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 159); WICKLOW (V.C. H20): no locality (RSM) (Schwarz and Shaw, 1998: p. 121).

Ireland (Yu, 1998: CD-Rom).

***Gambrus bipunctatus* (Tschek, 1872)**

Gambrus ornatus (Gravenhorst, 1829) misidentification

KERRY: Parknasilla, 2♀♀ emerged 4 and 7 August from a burnet *Zygaena ?filipendulae* (Lepidoptera: Zygaenidae) puparium taken 15 July, JWY (Morley, 1902: pp 54-55 as *Spilocryptus ornatus*; Morley, 1907a: p. 285 as *Gambrus ornatus*).

***Gambrus incubitor* (Linnaeus, 1758)**

ARMAGH: Richhill, ♀ 10 August 1909, HLO; Poyntzpass, WFJ (NMI) (Johnson, 1912a: p. 78 as *Spilocryptus*).

***Gambrus ornatulus* (Thomson, 1873)**

DOWN: Greencastle, ♀ 22 August 1930, sandhills, WFJ (Johnson, 1931c: p. 140).

***Gambrus ornatus* (Gravenhorst, 1829)**

Ireland (Broad, 2006: Validity as an Irish species confirmed by a specimen (coll. A. Anderson) identified by M. Schwarz. The species referred to as *ornatus* in older literature is now known as *bipunctatus* (Schwarz and Shaw, 1998).

***Gambrus superus* (Thomson, 1896)**

DOWN: Greencastle, ♂ 22 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 139).

***Hidryta sordida* (Tschek, 1871)**

CAVAN: Sloan's Fort, Cornafean, 30 June 1934, RCF (BMNH) (det. M. Schwarz) (unpublished); LAOIS (V.C. H14): no locality (RSM) (Schwarz and Shaw, 1998: p. 114).

Ireland (Yu, 1998: CD-Rom).

***Hoplocryptus bellosus* (Curtis, 1837)** **New to Ireland**

WEXFORD: The Raven, ♂ emerged 18 June 2000 ex trap nest of *Ancistrocerus* (Hymenoptera: Eumenidae), ♀♀ emerged 21 June 2000, 4 July 2000 and 9 July 2000 ex traps nest of *Hylaeus confusus* Nylander (Hymenoptera: Colletidae) on sand dunes/*Pinus* wood, COR (det. MRS as *Aritranis bellosa*) (NMI); WICKLOW: The Devil's Glen Wood, ♀♀ emerged 9 and 14 June 1999 ex trap nest, COR (det. MRS *as Aritranis bellosa*) (NMI) (all unpublished).

***Idiolispa analis* (Gravenhorst, 1807)**

ARMAGH: Poyntzpass, July, field, WFJ (NMI) (Johnson, 1919a: p. 36); Poyntzpass hill, July, WFJ (Johnson, 1920a: p. 9); CORK: Glengariff, JWY; KERRY: Kenmare, JWY (both Morley, 1902: p. 55 as *Liocryptus*. 3♂♀ 19-30 June 1901); Waterville, June, JWY (Morley, 1907a: p. 297); LOUTH: Termonfeckin, ♂♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 159); MAYO: Achill Sound, {June 1910}, WFJ (NMI); Belclare, {♂♀ July 1910}, JNH (NMI); Old Head Woods, {Louisburgh, ♂ 13 July 1910}, CM (NMI) (Morley, 1911a: p. 11 not uncommon).

***Idiolipsa obfuscator* (Villers, 1789)**

ARMAGH: Poyntzpass, Acton Wood, June, rare, WFJ (NMI) (Johnson, 1916a: p. 20 as *Idiolipsa*).

***Ischnus agitator* (Olivier, 1792)** **New to Ireland**

synonym *Ischnus minutorius* (Fabricius, 1804)

KERRY: Ardagh, Killarney, 28 April 1931, EFB (NMI); TIPPERARY: Aherlow, 13 and 23 September 1943, AWS (NMI); Flesk, Killarney, 14 July 1943, edge of field, BPB (NMI) (all as *minutorius*).

***Ischnus alternator* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♂ 26 July 1930, in field opposite, WFJ (NMI) (Johnson, 1931a: p. 54 as *Habrocryptus*); MAYO: Clare Island, ♀ 1909, on the cliffs, JNH (NMI) (Morley, 1911a: p. 12 as *Habrocryptus*).

***Ischnus inquisitorius* (Müller, 1776)**

synonym *Ischnus porrectorius* (Fabricius, 1787)

synonym *Ischnus migrator sensu* Gravenhorst misidentification

ANTRIM: Cave Hill, ♀, HLO (NMI) (Johnson, 1912a: p. 78 as *Habrocryptus porrectorius*); Garfield Street, Belfast, ♂♀, HLO (NMI) (Johnson, 1912a: p. 78 as *Spilocryptus migrator*); ARMAGH: Poyntzpass, August 1916, in fields, WFJ (NMI) (Johnson, 1917a: p. 38 as *Spilocryptus migrator*); DONEGAL: Portnoo, June, WFJ (Johnson, 1919a: p. 36 as *Spilocryptus migrator*); DOWN: Rostrevor, ♂ June 1924, WFJ (Johnson, 1927: p. 159 as *Spilocryptus migrator*); FERMANAGH: Tempo, bred from the emperor moth *Saturnia pavonia* (L.) (Lepidoptera: Saturniidae), CL (Johnson, 1919a: p. 36 as *Spilocryptus migrator*); KERRY: Rossbeigh, August, LHBW (Johnson, 1913: p. 13 *Spilocryptus migrator* var. *brevipennis* Desv.).

***Meringopus titillator* (Linnaeus, 1758)**

ARMAGH: Poyntzpass, July and August 1916, in fields, WFJ (Johnson, 1917a: p. 39 as *Goniocryptus*); CORK: Glengariff, ♂ 27 June 1901, JWY (Morley, 1902: p. 55 as *Goniocryptus*. ?*var. tarsis posticis ... totis nigris*; Morley, 1907a: p. 300 as *Goniocryptus*); DOWN: Rostrevor, August 1922, WFJ (Johnson, 1923: p. 38 as *Goniocryptus*); KERRY: ?Kenmare (Kennan) (Morley, 1907a: p. 300 as *Goniocryptus*); Waterville, ♀ 27 July 1901, JWY (Morley, 1902: p. 55 as *Goniocryptus*; Morley, 1907a: p. 300 as *Goniocryptus*); MAYO: Belclare, JNH; Sraheens Lough, WFJ (Morley, 1911a: p. 12 as *Goniocryptus*)

***Mesostenus transfuga* Gravenhorst, 1829**

DONEGAL: Coolmore, ♀ {10} September 1912, WFJ (NMI)(Johnson, 1913: p. 139).

***Sphecophaga vesparum* (Curtis, 1828)**

DOWN: Newcastle, ♀ 11 (ii) June {1927}, WFJ (NMI) (Johnson, 1929: p. 137); WICKLOW: Altidore, ♀ 26 June 1929, AWS (NMI) (det. AWS); Clara, ♀ 5 July

1925, AWS (NMI) (det. AWS); Powerscourt, ♀ 24 May 1928, AWS (NMI) (det. AWS) (all unpublished).

***Thrybius praedator* (Rossi, 1792)** **New to Ireland**

synonym *Thrybius leucopygus* (Gravenhorst, 1829)

WEXFORD: Curracloe, ♂ 17 July 1937, AWS (NMI) (det. GJK as *Thrybius leucopygus*); WICKLOW: Murrough, ♀ 13 June 1948, AWS (NMI) (det. AWS as *Thrybius leucopygus*).

***Thrybius tricolor* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♂ 23 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Gambrus*).

***Trychosis legator* (Thunberg, 1824)**

synonym *Goniocryptus clypearis* Thomson, 1873

synonym *Trychosis plebeja* (Tschek, 1871)

DOWN: Dundrum, ♀ {3} August 1926, WFJ (NMI) (Johnson, 1927: p. 159 as *Goniocryptus plebejus*); DUBLIN (V.C. H21): no locality (RSM) (Schwarz and Shaw, 1998: p. 116); KERRY: Waterville, ♂ 30 July 1901, JWY (Morley, 1902: p. 55 as *Goniocryptus clypearis*; Morley, 1907a: p.310 as *Goniocryptus plebejus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p.17 as *Goniocryptus plebejus*); WICKLOW (V.C. H20): no locality, (RSM) (Schwarz and Shaw, 1998: p. 116).

Ireland (Yu, 1998: CD-Rom).

Hemigastrini

***Aconias tarsatus* (Bridgman, 1881)** **New to Ireland**

KERRY: Killarney, September 1922, July and August 1923, August 1924, August 1926, September 1927, September 1928 and 6 September 1930, EFB (NMI); WICKLOW: Cloghleagh, 9 August 1931, AWS (NMI).

***Aptesis assimilis* (Gravenhorst, 1829)**

synonym *Microcryptus distans* Thomson, 1883

DOWN: Rostrevor, ♂♂ 5 and 26 July 1930, field opposite, WFJ (Johnson, 1931a: pp 53-54 as *Microcryptus distans*); same locality, ♂9 July {1927}, WFJ (NMI); LOUTH:

Dundalk, ♂ 14 July {1927}, WFJ (NMI) (both Johnson, 1929: p. 136 as *Microcryptus*).

***Aptesis femoralis* (Thomson, 1883)**

ANTRIM: Killead, August 1923, WFJ (Johnson, 1927: p. 159 as *Microcryptus*, ♂); ARMAGH: Poyntzpass, {10} July {1920}, at hogweed *Heracleum* in field, WFJ (NMI) (Johnson, 1921a: p. 104 as *Microcryptus*); DOWN: Rostrevor, June 1925, WFJ (NMI) (Johnson, 1927: p. 159 as *Microcryptus*, ♂).

***Aptesis flagitator* (Rossi, 1794)**

DOWN: Greencastle, 8 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Acanthocryptus*); Rostrevor, ♂ 12 August 1929, field opposite, WFJ (NMI) (Johnson, 1929: p. 157 as *Acanthocryptus*); Warrenpoint, ♂ 15 August {1928}, WFJ (NMI) (Johnson, 1929: p. 136 as *Acanthocryptus*).

***Aptesis improba* (Gravenhorst, 1829)**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Microcryptus*, ♂); DONEGAL: Coolmore, {27} August {1917}, among sallows *Salix*, WFJ (NMI); Portnoo, September 1917, among sallows *Salix*, WFJ (NMI) (Johnson, 1918: p. 108 as *Microcryptus*); no data (Johnson, 1917a: p. 38 as *Microcryptus*); DOWN: Greencastle, ♂ 16 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 140 as *Microcryptus*); Newcastle, ♀ 25 August, WFJ (NMI); Rostrevor, ♂ 8 July, WFJ (both Johnson, 1929: p. 136 as *Microcryptus*); same locality, ♀ 7 August 1929, field opposite, WFJ (NMI) (Johnson, 1930: pp 156-157 as *Microcryptus*); LOUTH: Termonfeckin, August 1924, WFJ (Johnson, 1927: p. 159 as *Microcryptus*, ♂).

***Aptesis jejunator* (Gravenhorst, 1807)**

synonym *Aptesis abdominator* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, June, WFJ (Johnson, 1913: p. 139 as *Microcryptus abdominator*); DOWN: Greencastle, ♂ 20 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as *Microcrypus abdominator*); KERRY: Rossbeigh, ♂♂ May, CM (Morley, 1907a: p. 37 as *Microcryptus abdominator*); MAYO: Carrowmore Hill, Louisburgh, {♂ 19 July 1910}, CM (NMI) (Morley, 1911a: p. 10 as *Microcryptus*

abdominator).

***Aptesis nigricollis* (Thomson, 1883)**

ARMAGH: Poyntzpass, {12} August {1914}, by sweeping among herbage on roadside, not a common species, WFJ (NMI) (Johnson, 1916a: p. 20 as *Acanthocryptus*); DONEGAL: Coolmore, {2 September 1916}, among sallows *Salix*, WFJ (NMI) (Johnson, 1917a: p. 38 as *Acanthocryptus*).

***Aptesis nigritula* (Thomson, 1885)**

synonym *Cubocephalus nigripes* (Strobl, 1901)

DOWN: Newcastle, ♂ 9 {16} September {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Cubocephalus nigripes*); Rostrevor, Victoria Square, ♂ 17 August 1929, WFJ (NMI) (Johnson, 1930: p. 156 as *Cubocephalus nigripes*).

***Aptesis nigrocincta* (Gravenhorst, 1815)**

ARMAGH: Poyntzpass, 10 November 1904 (NMI), January 1906, 17 February 1904 and August, September (NMI), field and moss on roadside, sweeping grass, WFJ (Johnson, 1907: p. 246 as *Microcryptus*; Morley, 1907b: p. 160 as *Microcryptus*. ♀♀; Johnson, 1920c: p. 66 as *Microcryptus*; Johnson, 1921a: p. 105 as *Microcryptus*. A dark variety of the male, *teste* Dr Roman; Johnson, 1922b: p. 69 as *Microcryptus*. Var. *jucundus* Gravenhorst); same locality, ♂, WFJ (Johnson, 1912a: p. 78 as *Macrocryptus*); DONEGAL: Coolmore, August 1917, on the roadside and among sallows *Salix*, WFJ (Johnson, 1915: p. 131 as *Microcryptus*; Johnson, 1918: p. 108 as *Microcryptus*); DOWN: Dromore, ♂ August 1925, WFJ (NMI) (Johnson, 1927: p. 159 as *Microcryptus*); Newcastle, ♂ 5 September, WFJ (NMI) (Johnson, 1929: p. 136 as *Microcryptus*); Rostrevor, road at Warrenpoint, September 1922, on grass, WFJ (Johnson, 1923: p. 38 as *Microcryptus*); FERMANAGH: Summer Hill, {14} December {1908}, moss on lawn, WFJ (NMI) (Johnson, 1907: p. 246 as *Microcryptus*; Johnson, 1920c: p. 66 as *Microcryptus*); MAYO: Louisburgh, ♂♂ July {1910}, CM (NMI) (Morley, 1911a: p. 10 as *Microcryptus*).

***Aptesis subguttata* (Gravenhorst, 1829)**

DONEGAL: Coolmore, ♂ August 1917, among sallows *Salix*, WFJ (Johnson, 1918:

p. 108 as *Microcryptus*); MAYO: Clare Island, ♂ June 1909, JNH (Morley, 1911a: p. 10 as *Microcryptus*).

***Cubocephalus anatorius* (Gravenhorst, 1829)**

MAYO: Mulranny {Achill Sound}, ♀ June 1910, WFJ (NMI) (Morley, 1911a: p. 10 as *Cratocryptus*).

***Cubocephalus brevicornis* (Taschenberg, 1865)**

synonym *Cubocephalus oviventris* misidentified

ARMAGH: Poyntzpass, August, at angelica *Angelica*, rare, WFJ (NMI) (Johnson, 1914a: p. 65); DONEGAL: Portnoo, June, in window, WFJ (NMI) (Johnson, 1919a: p. 35 as *Cubocephalus oviventris*); Portnoo shore, June, WFJ (NMI) (Johnson, 1920a: p. 9 as *Cubocephalus brevicornis*); DUBLIN: Harold's Cross, ♀ 23 October 1955, on beech *Fagus*, AWS (NMI) (det. JFP as *Cubocephalus oviventris*) (unpublished); MAYO: Old Head {Louisburg}, ♂ 13 July 1910, CM (NMI) (Morley, 1911a: p. 10).

***Cubocephalus distinctor* (Thunberg, 1824)**

synonym *Cubocephalus fortipes* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, July, in fields, rare, WFJ (Johnson, 1914a: p. 65 as *Cubocephalus fortipes*).

***Cubocephalus nigriventris* (Thomson, 1874)** **New to Ireland**

CAVAN: Farinseer, 4 October 1959, AWS (NMI); MAYO: Old Head Hotel, 5 June 1960, AWS (NMI).

***Demopheles corruptor* (Taschenberg, 1865)** **New to Ireland**

DUBLIN: Skeagh Ho (House), 12 August 1937, AWS (NMI); KERRY: Blackstones, 6 July 1934, AWS (NMI); LOUTH: Termonfeckin, 9 July 1933, AWS (NMI).

***Giraudia grisescens* (Gravenhorst, 1829)**

DONEGAL: Coolmore, among sallows *Salix*, WFJ (Johnson, 1915: p. 131 as *Plectocryptus*).

***Oresbius arridens* (Gravenhorst, 1829)**

DONEGAL: Coolmore, {15} September {1915}, at flowers of wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1916a: p. 19 as *Microcryptus*); DOWN: Rostrevor,

vicarage, 12 July 1929, var. no white band on antennae, WFJ (NMI) (Johnson, 1930: p. 157 as *Microcryptus*. *Fide* Dr A. Roman); WEXFORD: Kilmore, AB (Morley, 1907a: p. 39 as *Microcryptus*).

***Oresbius galactinus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, ♀ 10 November 1904, {♀ 2 August 1915 (NMI)}, in moss on roadside, WFJ (Johnson, 1907: p. 246 as *Microcryptus*; Morley, 1907b: p. 160 as *Microcryptus*; Johnson, 1920c: p. 66 as *Microcryptus*); MAYO: Croaghpatrick, 2500ft, ♀, CM (NMI) (Morley, 1911a: p. 10 as *Microcryptus*).

***Oresbius leucopsis* (Gravenhorst, 1829)**

synonym *Phygadeuon nycthemerus* Gravenhorst 1829

DOWN: Rostrevor, 28 July, WFJ (Johnson, 1929: p. 136 as *Cratocryptus*); same locality, ♂ 14 August 1929, river, WFJ (NMI) (Johnson, 1930: p. 157 as *Phygadeuon nycthemerus*. *Fide* Dr A. Roman).

***Parmortha parvula* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Glenasmole, 24 September 1930, AWS (NMI).

***Parmortha pleuralis* (Thomson, 1873)** **New to Ireland**

CLARE: Spanish Point, 1 September 1926, RAP (NMI).

***Pleolophus basizonus* (Gravenhorst, 1829)**

DONEGAL: Portnoo, {17} September, cliff, WFJ (NMI) (Johnson, 1919a: p. 35 as *Microcryptus*).

***Pleolophus brachypterus* (Gravenhorst, 1815)**

synonym *Microcryptus curtulus* Kriechbaumer, 1891

ANTRIM: Cave Hill, near Belfast, September, HLO (Johnson, 1913: p. 139 as *Microcryptus*); ARMAGH: Poyntzpass, May, field and in avenue among herbage, WFJ (NMI) (Johnson, 1916a: p. 19 as *Microcryptus*; Johnson, 1921a: p. 105 as *Microcryptus*); Poyntzpass hill, May, WFJ (Johnson, 1920a: p. 9 as *Microcryptus*); DONEGAL: Coolmore, {18 September 1914}, among herbage, WFJ (NMI) (Johnson, 1915: p. 131 as *Microcryptus*); Portnoo shore, {4} June {1919}, WFJ (NMI) (Johnson, 1920a: p. 9 as *Microcryptus*); DOWN: Newcastle, ♂18 May, WFJ

(Johnson, 1929: p. 136 as *Microcryptus curtulus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Microcryptus*); Termonfeckin, ♂ August 1924, WFJ (Johnson, 1927: p. 159 as *Microcryptus*); MAYO: Clare Island, ♂ July {1910}, CM (NMI) (Morley, 1911a: p. 10 as *Microcryptus*).

***Pleolophus micropterus* (Gravenhorst, 1815)**

ARMAGH: Poyntzpass, {30} July {1921}, sweeping, 8.30-9 pm, WFJ (NMI) (Johnson, 1922b: p. 69 as *Microcryptus*); MAYO: Clare Island, ♀, on the cliffs, JNH; Darby's Point, ♂ September, WFJ (Morley, 1911a: p. 10 as *Microcryptus*).

***Pleolophus sericans* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♂ 23 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Microcryptus*); [KERRY: Parknasilla, ♀ 24 July 1901, JWY (Morley, 1902: p. 55 as *Microcryptus* ?*sericans*)].

***Pleolophus sperator* (Müller, 1776)**

DONEGAL: Portnoo, September 1917, on sandhills, WFJ (NMI) (Johnson, 1918: p. 108 as *Microcryptus*); DOWN: Greencastle, ♂ 18 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Microcryptus*); LOUTH: Termonfeckin, ♂ July 1924, WFJ (Johnson, 1927: p. 159 as *Microcryptus*); MAYO: Louisburgh, ♂ 15 July 1910, CM (NMI) (Morley, 1911a: p. 10 as *Microcryptus*).

***Polytribax arrogans* (Gravenhorst, 1829)**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p.159 as *Microcryptus*, ♂); DONEGAL: Portnoo cliff, ♂ {24} June {1920}, WFJ (NMI) (Johnson, 1920a: p. 9 as *Microcryptus*. With scutellum black); DOWN: Rostrevor, ♂ 7{8} August 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 156 as *Microcryptus*); Warrenpoint, ♂ 12 and 18 August (NMI), WFJ (Johnson, 1929: p. 136 as *Plectocryptus arrogans* Thoms.); FERMANAGH: Tempo Manor, ♂ May, WFJ (NMI) (det. AR) (Johnson, 1920a: p. 9 as *Microcryptus*. With head and scutellum dark); KERRY: Parknasilla, ♂ 22 July 1901, JWY (Morley, 1902: p. 55 as *Plectrocryptus*; Morley, 1907a: p. 30 as *Microcryptus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Microcryptus*); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 159 as

Microcryptus, ♂); MAYO: Achill Sound, ♂ June 1911, WFJ (NMI) (Morley, 1911a: p. 10 as *Microcryptus*).

***Polytribax perspicillator* (Gravenhorst, 1807)**

ARMAGH: Poyntzpass hill, June, WFJ (Johnson, 1914a: p. 65 as *Microcryptus*); same locality, Acton Wood, June, WFJ (Johnson, 1916a: p. 19); same locality, ♂ August 1916, in fields, WFJ (Johnson, 1917a: p. 38 as *Microcryptus*); DONEGAL: Coolmore, August 1912, WFJ (Johnson, 1913: p. 139 as *Microcryptus*); Portnoo, September 1917, among sallows *Salix*, WFJ (NMI) (Johnson, 1918: p. 108 as *Microcryptus*); DOWN: Greencastle, ♀ 28 August 1930, on beach, WFJ (NMI) (Johnson, 1931c: p. 140 as *Microcryptus*); LOUTH: Termonfeckin, ♀ August 1924, WFJ (NMI) (det. AR) (Johnson, 1927: p. 159 as *Microcryptus*).

***Polytribax rufipes* (Gravenhorst, 1829)**

synonym *Polytribax curvus* (Schrank, 1802) preoccupied

ARMAGH: Poyntzpass, ♂ {16} October {1919}, on wing in field, WFJ (NMI) (Johnson, 1920a: p. 9 as *Microcryptus*. With trochanters red); KERRY: Parknasilla, ♂ 22 July 1901, JWY (Morley, 1902: p. 55 as *Plectocryptus curvus*).

***Schenkia graminicola* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, August, in fields, WFJ (Johnson, 1914a: p. 65); same locality, ♀ 14 September 1927, WFJ (NMI) (det. AR) (unpublished); DONEGAL: Coolmore, August 1912 and 1917, in house, WFJ (Johnson, 1913: p. 139 as *Microcryptus*; Johnson, 1918: p. 108 as *Microcryptus*); Portnoo, September 1917, at flowers, WFJ (Johnson, 1918: p. 108 as *Microcryptus*); DOWN: Dundrum, June and August 1926, WFJ (NMI) (Johnson, 1927: p. 159 as *Microcryptus*); Rostrevor, ♀ 14 September 1929, field opposite, WFJ (Johnson, 1930: p. 157 as *Microcryptus*).

***Schenkia labralis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, ♂ July, in field, WFJ (Johnson, 1916a: p. 20 as *Microcryptus*); WATERFORD: Stradbally, ♂ 22-30 June 1907, HWA (Morley, 1908b: p. 276 as *Microcryptus*).

Phygadeuontini

***Aclastus gracilis* (Thomson, 1884) (*sensu lato*)**

CAVAN: no locality (Schwarz and Shaw, 2000: p. 177); WICKLOW: Ballinacor, ♀ 28 October 1942, AWS (NMI) (det. JFP); Russellstown, ♀ 17 July 1938, AWS (NMI) (det. JFP) (both unpublished).

Ireland (Horstmann, 1980: p. 153).

***Aclastus micator* (Gravenhorst, 1807)**

Ireland (Horstmann, 1980: p. 143 coll. Townes).

***Aclastus minutus* (Bridgman, 1886)**

CARLOW: Oak Park Teagasc farm, 27 August 2002, collected using a suction sampler from a grass field (Anderson *et al*., 2006: p. 246).

***Aclastus pilosus* Horstmann, 1980**

ANTRIM (VC. H39): no locality (Schwarz and Shaw, 2000: p. 178).

***Aclastus solutus* (Thomson, 1884)**

CAVAN (VC. H30): no locality (Schwarz and Shaw, 2000: p. 178); KERRY: Cloonee, 3 July 1901, JWY (Morley, 1902: p. 55 as *Hemiteles* ? *solutus*).

Ireland (Horstmann, 1980: p. 146 Coll. Townes).

[***Aclastus* sp. B**

CAVAN (VC. H30): no locality (Schwarz and Shaw, 2000: p. 179).

****Acrolyta marginata* (Bridgman, 1883)** **New to Ireland**

DUBLIN: Killakee, ♀ 21 October 1954, AWS (NMI) (det. JFP as *Agasthenes*).

***Acrolyta nens* (Hartig, 1838)**

CAVAN (VC. H30): no locality (Schwarz and Shaw, 2000: p. 159).

***Acrolyta rufocincta* (Gravenhorst, 1829)**

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Hemimachus*).

***Agasthenes subarcticus* (Jussila, 1965)**

DUBLIN: Glenasmole, ♀ 24 June 1942, AWS (BMNH); WATERFORD: Clonea (Cloonea), ♂ 3 July 1901, JWY (BMNH); WEXFORD: Curracloe, ♀ July 1937, AWS and GMS (BMNH) (all det. KH).

Ireland (Yu, 1998: CD-Rom).

***Agasthenes varitarsus* (Gravenhorst, 1829)**

DUBLIN: no locality, 24 June 1942, AWS (Townes, 1983: p. 11).

***Amphibulus gracilis* Kriechbaumer, 1893**

synonym *Stylocryptus bispinus* (Thomson, 1894)

DOWN: Warrenpoint, Clonallon Road, ♂ 12 September, on thistles *Carduus*, WFJ (Johnson, 1929: p. 136 as *Stylocryptus gracilis*. As far as I known, this species has not hitherto been recorded as British).

***Arotrephes speculator* (Gravenhorst, 1829)**

DONEGAL: Coolmore, August 1912, WFJ (NMI) (Johnson, 1913: p. 139 as *Phygadeuon*); DOWN: Rostrevor, ♀ June 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Phygadeuon*).

***Atractodes* (*Asyncrita*) *albovinctus* Haliday, 1839**

ANTRIM: Killead, August 1923, WFJ; DOWN: Rostrevor, May 1924, WFJ; LOUTH: Termonfeckin, July 1924, WFJ (all Johnson, 1927: p. 159).

Ireland (Haliday, 1839: p. 119 not common; Morley, 1907a: p. 251 under *Atractodes subrufus* Gravenhorst; Fitton, 1976: p. 331 syntypes ♂♀...lost. Identity. Unknown, the name remains a *nomen dubium*).

***Atractodes* (*Asyncrita*) *angustipennis* Förster, 1876**

Ireland (Jussila, 2001b: p. 201 Eire).

***Atractodes* (*Asyncrita*) *croceicornis* Haliday, 1839**

synonym *Atractodes fatalis* Förster, 1876

synonym *Atractodes compressus* Thomson, 1884 preoccupied

DONEGAL: Coolmore, September, on roadside, WFJ (Johnson, 1914a: p. 65 as *Atractodes compressus*. Taken by Haliday at Holywood, Co. Down); Portnoo, on sandhills, 3♀♀ June (NMI) and ♀ September 1917, at flowers, WFJ (NMI) (Johnson, 1918: p. 108; Johnson, 1921a: p. 105); same locality, cliff, June, WFJ (Johnson, 1921a: p. 105 as *Atractodes fatalis*); DOWN: Holywood, AHH (Morley, 1907a: p. 250 as *Atractodes compressus.* Found uncommonly); Rostrevor, ♂ 22 July, WFJ (Johnson, 1929: p.136 as *Atractodes fatalis*); same locality, ♂20 June 1929, field,

WFJ (Johnson, 1930: p. 157 as *Atractodes compressus*); LOUTH: Termonfeckin, ♂ July 1924, WFJ (NMI) (Johnson, 1927: p. 159 Dr A. Roman of Stockholm, who named this specimen for me and to whom I sent a ♀ from Portnoo, Co. Donegal, says that it is identical with *compressus* Thoms. and *fatalis* Thunb.).

Ireland (Haliday, 1839: p. 119 rare; Morley, 1907a: p. 253; Jussila, 1965: p. 149; Townes *et al.*, 1965: p. 150; Fitton, 1976: p. 332 syntypes ♀...lost; Jussila, 1979a: p. 37 syntypes ♀; Ireland (lost). The specimen labelled and published as "type" by Morley (1913) (ND) is mounted on a pin with a black head, which, according to A. W. Stelfox (Fitton, 1976), indicates that it is not British (or Irish) and therefore cannot be one of the syntypes; p. 38 Eire; Jussila, 1994: p. 130; Jussila, 2001b: p. 201 Eire).

***Atractodes* (*Asyncrita*) *cryptobius* Förster, 1876**

KERRY: no locality (Jussila, 1979a: p. 40 Eire).

Ireland (Jussila, 2001b: p. 201 Eire).

***Atractodes* (*Asyncrita*) *cultellator* Haliday, 1839**

DOWN: Holywood, ♀ (holotype), AHH (NMI) (Haliday, 1839: p. 120; Fitton, 1976: p. 332; Jussila, 1979a: p. 40).

***Atractodes* (*Asyncrita*) *exilis* Haliday, 1839**

DONEGAL: Coolmore, {7} September 1916, on roadside among herbage, WFJ (NMI) (Johnson, 1917a: p. 38); Portnoo sandhills, September, WFJ (Johnson, 1920a: p. 9); DOWN: Rostrevor, ♂ June 1924, WFJ (NMI) (Johnson, 1927: p. 159); MAYO: Clare Island, ♂ {July 1910}, CM (NMI); Curraun, ♀♀, sandhills, WFJ (NMI); Louisburgh, ♂ {17 July 1910}, CM (NMI) (Morley, 1911a: p. 11; Johnson, 1917a: p. 38).

Ireland (Haliday, 1839: p. 119 very rare; Morley, 1907a: p. 252; Townes *et al.*, 1965: p. 150; Jussila, 1979a: p. 27 lectotype ♀: the British Isles, M. G. Fitton designated 1976 (ND); p. 28 Eire; Jussila, 2001b: p. 202 Eire).

***Atractodes* (*Asyncrita*) *foveolatus* Gravenhorst, 1829**

DOWN: Holywood, AHH (Morley, 1907a: p. 253).

***Atractodes* (*Atractodes*) *alpestris* Roman, 1918**

DUBLIN: Dublin, ♂ 30 August 1945, AWS (Jussila, 1979a: p. 14).

Ireland (Jussila, 2001b: p. 193 Eire).

***Atractodes* (*Atractodes*) *arator* Haliday, 1839**

DOWN: Holywood, lectotype ♀, paralectotypes 2♀♀, AHH (NMI) (Haliday, 1839: p. 119 not common; Fitton, 1976: p. 331; Jussila, 1979a: p. 14 designated by C. Morley 1913).

Ireland (Jussila, 1979a: p. 15 Eire; Jussila, 2001b: p. 194 Eire).

***Atractodes* (*Atractodes*) *bicolor* Gravenhorst, 1829**

DOWN: Rostrevor, ♀ {3} July 1923, WFJ (NMI) (Johnson, 1927: p. 159).

***Atractodes* (*Atractodes*) *citator* Haliday, 1839**

Ireland (Haliday, 1839: p. 120; Morley, 1907a: p. 249 originally recorded...by Haliday, and no one has ventured to subsequently identify it; Fitton, 1976: p. 331 type(s) ♀...(lost). Identity. Unknown, the name remains a *nomen dubium*; Jussila, 1979a: p. 42 type(s) ♀: Ireland, specimen(s) lost (Fitton 1976)).

***Atractodes* (*Atractodes*) *fumatus* Haliday, 1839**

Ireland (Jussila, 1979a: p. 11 ♀. lectotype ♀: the British Isles (ND) [NMI], C. Morley designated; p. 13 the Irish specimens (♂♀) have a wholly black abdomen and are also darker otherwise. Eire; Jussila, 2001b: p. 196 Eire).

***Atractodes* (*Atractodes*) *gilvipes* Holmgren, 1860**

DONEGAL: Coolmore, {2 September 1914} on the sandhills at thistles *Carduus*, WFJ (NMI) (Johnson, 1915: p. 131); MAYO: Westport, ♂ July 1911, JNH (NMI) (Morley, 1911a: p. 11).

***Atractodes* (*Atractodes*) *gravidus* Gravenhorst, 1829**

DOWN: Greencastle, ♂ 19 August 1930, roadside, ♂ 22 August 1930 (NMI), at castle, WFJ (Johnson, 1931c: p. 140); Newcastle, Donard demense, ♂ 23 September, between 4 and 5p.m., WFJ (NMI) (Johnson, 1929: p. 136); Rostrevor, ♀ 6 June 1929, river, ♀ 13 June 1929, woods, WFJ; same locality, Victoria Square, ♀ 20 August 1929, WFJ (all Johnson, 1930: p. 157).

Ireland (Haliday, 1839: p. 118 rare; Morley, 1907a: p. 250 rare).

***Atractodes* (*Atractodes*) *pauxillus* Förster, 1876**

KERRY: no locality (Jussila, 1979a: p. 19 Eire).

Ireland (Jussila, 2001b: p. 197 Eire).

***Atractodes* (*Atractodes*) *piceicornis* Haliday, 1839**

GALWAY: Eyrecourt, ♀ September, AHH (Haliday, 1839: p. 119; Morley, 1907a: p. 251; Fitton, 1976: p. 32 the name remains a *nomen dubium*; Jussila, 1979a: p. 42).

***Atractodes* (*Atractodes*) *pusillus* Förster, 1876**

DUBLIN: no locality; KERRY: no locality (both Jussila, 1979a: p. 20 Eire).

Ireland (Jussila, 2001b: p. 197 Eire).

***Atractodes* (*Atractodes*) *salius* Haliday, 1839**

GALWAY: Eyrecourt, ♀ September, AHH (Haliday, 1839: p. 119; Morley, 1907a: p. 252; Fitton, 1976: p. 332 syntypes...lost...remains a *nomen dubium*; Jussila, 1979a: p. 426); MAYO: Sraheens Lough, June 1910, WFJ (Morley, 1911a: p. 11 very rare).

Doubtfully place species in Fitton *et al*. (1978).

***Atractodes* (*Cyclaulatractodes*) *helveticus* (Förster, 1876)**

synonym *Atractodes* (*Cyclaulatractodes*) *oreophilus* Förster, 1876

DUBLIN: no locality (Jussila, 1979a: p. 41 as *Atractodes* (*Cyclaulatractodes*) *oreophilus*. Eire).

Ireland (Jussila, 2001b: p. 205 Eire).

[*Atractodes dionaeus* Haliday, 1837 Nomen Nudum

Ireland (Haliday, 1839: p. 118 not common; Fitton, 1976: p. 332 syntypes...lost. Identity. Unknown, the name remains a *nomen dubium*); Jussila, 1979a: p. 42 syntypes ♂♀: Ireland and England, specimens lost.]

***Bathythrix aerea* (Gravenhorst, 1829)**

MAYO: Brackloon Wood, Westport, ♂ August, PEG (Morley, 1911a: p. 11 as *Panargyrops*).

***Bathythrix claviger* (Taschenberg, 1865)**

DOWN: Newcastle, ♂ 13 May, WFJ (NMI) (Johnson, 1929: p. 136 as *Leptocryptus*

(*Panargyrops*)).

***Bathythrix decipiens* (Gravenhorst, 1829)**

FERMANAGH: Carrickcreagh, ♀ 23 September 1939, PE (RCF collection) (BMNH);

KILDARE: west of Leixlip, ♂ 16 August 1942, AWS (BMNH) (Sawoniewicz, 1980: p. 337).

***Bathythrix lamina* (Thomson, 1884)** **New to Ireland**

DUBLIN: Saggart, ♀ 29 September 1935, AWS (NMI) (det. G. J. Kerrich); WICKLOW: Ballyhubbock, ♀ 14 May 1937, AWS (NMI) (det. G. J. Kerrich).

***Bathythrix pellucidator* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Lucan, ♂ 5 August 1943, AWS (NMI) (det. G. J. Kerrich); TIPPERARY: Aherlow, ♂ 13 September 1943, AWS (NMI) (det. G. J. Kerrich).

***Bathythrix prominens* (Strobl, 1901)**

DUBLIN: Glenasmole, ♀♀ September 1937, AWS (BMNH); KILDARE: Kilkea Park, ♀♀ September 1937, AWS (BMNH) (Sawoniewicz, 1980:p. 352).

***Bathythrix rugulosa* (Thomson, 1884)**

Ireland (Sawoniewicz, 1980: p. 331).

***Bathythrix thomsoni* (Kerrich, 1942)**

Ireland (Jussila, 1986: p. 125 Eire).

***Blapsidotes vicinus* (Gravenhorst, 1829)**

synonym *Hemiteles melanarius* Gravenhorst, 1829

CORK: Glengarriff, ♂♀♀ emerged 29 July 1943 from pupa of a red admiral *Vanessa atalanta* (L.) (Lepidoptera: Nymphalidae), J. E. Flynn (NMI) (det. AWS as *Hemiteles melanarius*) (unpublished); DOWN: Newcastle, ♀ 3 September 1929, in window, WFJ (NMI) (Johnson, 1930: p. 157 as *Astomaspis* (*Hemiteles*) *melanarius*. Var. (*fide* Dr A. Roman) legs entirely red (*rufipes* Strobl)).

***Charitopes areolaris* (Thomson 1884)**

WICKLOW: no locality, 16 August 1943, BPB (Townes, 1983: p. 59 as *Charitopes areolaris areolaris*).

***Charitopes clausus* (Thomson, 1888)**

WICKLOW: no locality (Townes, 1983: p. 54).

***Charitopes gastricus* (Holmgren, 1868)**

DUBLIN: Glenasmole; MEATH: Agher {♀ 29 August 1937, AWS (BMNH)}; LEITRIM: Tullaghan (as Tullagham) {♀♀ October 1937, AWS (BMNH)}; WICKLOW: no locality (Townes, 1983: p. 67).

***Cremnodes atricapillus* (Gravenhorst, 1815)** **New to Ireland**

DUBLIN: Glenasmole, 25 August 1937, AWS (NMI); Phoenix Pk (Park), 18 July 1945, AWS (NMI); WICKLOW: Ballinclea, 28 July 1940, AWS (NMI); Blessington, 19 June 1938, AWS (NMI); Glending, 16 September 1953, AWS (NMI).

Ireland: Haliday (NMI).

***Diaglyptidea conformis* (Gmelin, 1790)**

DONEGAL: Coolmore, September 1916, in porch of bungalow, WFJ (NMI) (Johnson, 1917a: p. 38 as *Hemiteles*); WICKLOW: Glenasmole, ♂ 6 October 1938, AWS (NMI) (det. JFP) (unpublished).

***Dichrogaster aestivalis* (Gravenhorst, 1829)**

DUBLIN: Glenasmole, {♀25 May 1937, AWS (BMNH) (det. HKT)}; KILDARE: Kilkea Park, {♀ September 1937, AWS (BMNH) (det HKT)} (Townes, 1983: p.119).

***Dichrogaster genalis* (Habermehl, 1925)**

WICKLOW: no locality, 22 August 1940, BPB (Townes, 1983: p. 92).

Ireland (Schwarz and Shaw, 2000: p. 180)

***Dichrogaster liostylus* (Thomson, 1885)**

DOWN: Rostrevor, ♀ 31 May 1930, in garden, WFJ (Johnson, 1931a: p. 53 as *Hemiteles*); KERRY: no locality, 2 August 1940 and 16 July 1943, BPB (Townes, 1983: p. 100).

***Encrateola laevigata* (Ratzeburg, 1848)**

DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 159 as *Hemiteles*); Newcastle, ♀ 27 August, WFJ (NMI) (Johnson, 1929: p. 136 as *Hemiteles*).

***Endasys brevis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, August, in fields, WFJ; DONEGAL: Coolmore, {17} September {1913}, at Umbelliferae, WFJ (NMI) (Johnson, 1914a: p. 65 as *Glyphichnemis*); same locality, September, on flowers of Umbelliferae, WFJ (Johnson, 1916a: p. 20 as *Glyphichnemis*); DOWN: Dundrum, June 1926, WFJ (NMI) (Johnson, 1927: p. 159 as *Glyphicnemis*. ♂. I took at Dundrum, 8 July 1921, a ♂ specimen which varies as follows: hind legs entirely black, anterior femora black with apex red, apophyses very strong and sharp, body with marked black pilosity. Dr A. Roman, to whom I submitted it, says he has Swedish and Esthonian ♂♂ of the same variety); Greencastle, ♂ 22 August 1930, sandhills, WFJ (NMI) (Johnson, 1931: p. 140 as *Stylocryptus*); Newcastle, August 1926, WFJ (Johnson, 1927: p. 159 as *Glyphicnemis*. ♂); Rostrevor, August 1922, WFJ (Johnson, 1922: p. 38 as *Glyphicnemis*); same locality, ♂♂ 26 and 28 August 1929 (NMI), field, WFJ (Johnson, 1930: p. 157 as *Stylocryptus*. *Fide* Dr A. Roman); LOUTH: Termonfeckin, August 1924, WFJ (Johnson, 1927: p. 159 as *Glyphicnemis*. ♂); MAYO: Carrowmore Hill, 500ft, {♂ 19 July 1910}, swept, CM (NMI); Clare Island, ♂♂ July 1910, on hogweed *Heracleum* flower, CM (NMI) (Morley, 1911a: p. 11 as *Glyphicnemis*).

***Endasys erythrogaster* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, ♀ 9 August 1909, WFJ (NMI) (Johnson, 1912a: p. 78 as *Glyphicnemis*); DOWN: Dundrum, June 1926, WFJ; Newcastle, August 1926, WFJ (NMI) (Johnson, 1927: p. 159 as *Glyphicnemis*. ♂); Rostrevor, ♀ 8 July, WFJ (NMI) (Johnson, 1929: p. 136 as *Stylocryptus*); LOUTH: Termonfeckin, July 1924, WFJ (Johnson, 1927: p. 159 as *Glyphicnemis*. ♂); MAYO: Westport, ♀ July, JNH (Morley, 1911a: p. 11 as *Glyphicnemis*).

***Endasys senilis* (Gmelin, 1790)**

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Glyphicnemis*); DONEGAL: Portnoo, June, mountain road, WFJ (NMI) (Johnson, 1919a: p. 35 as *Glyphicnemis*).

***Endasys varipes* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♀ 17 July 1930, in garden, WFJ (NMI) (Johnson, 1931a: p. 54 as

Stylocryptus); LOUTH: Dundalk, ♀ 14 July, WFJ (NMI) (Johnson, 1929: p. 136 as *Stylocryptus*).

***Ethelurgus vulnerator* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♀ 21 September 1930, in greenhouse, WFJ (NMI) (Johnson, 1931a: p. 54 as *Phygadeuon*. *Teste* Dr Roman); WICKLOW: no locality (Townes, 1983: p. 132).

***Eudelus scabriculus* (Thomson, 1884)** **New to Ireland**

DOWN: Tollymore Park, 16 May 1961, AWS (NMI).

***Gelis acarorum* (Linnaeus, 1758)**

synonym *Gelis fraudulentus* (Förster, 1850)

KERRY: Waterville, July, WJY (Morley, 1907a: p. 196 as *Pezomachus*); MAYO: Clare Island, ♀ July 1910, CM (NMI) (Morley, 1911a: p. 11 as *Pezomachus fraudulentus*).

***Gelis agilis* (Fabricius, 1775)**

synonym *Gelis instabilis* (Förster, 1850)

MAYO: Clare Island, ♀ July 1910, CM (NMI) (Morley, 1911a: p. 11 as *Pezomachus instabilis*); WEXFORD: Enniscorthy, AB; Kilmore, AB (Morley, 1907a: p. 228 as *Pezomachus instabilis*).

Ireland (Stelfox, 1929: p. 67 as *Gelis instabilis*. Mr Gwynn also brought me some *Phobocampa* cocoons in July, 1926, bred from a small tortoiseshell *V. urticae* (now *Aglais urticae* (L.)) (Lepidoptera: Nymphalidae), from which, between the 3rd and 7th of the following month I bred 4♀♀).

***Gelis albipalpus* (Thomson, 1884)**

CLARE (V.C. H9): no locality (RSM) (Schwarz and Shaw, 1999: p. 124).

Ireland (Yu, 1998: CD-Rom).

***Gelis anthracinus* (Förster, 1850)**

synonym *Gelis gonatopinus* (Thomson, 1884)

CAVAN (V.C. H30): no locality (RSM); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (Speight and Healy, 1977: p. 153); KILDARE (V.C. H19):

no locality (RSM) (both Schwarz and Shaw, 1999: p. 124); MAYO: Carrowmore Hill {Louisburgh}, ♀ {July 1910}, under a stone, CM (NMI) (Morley, 1911a: p. 11 as *Pezomachus*); WEXFORD: Kilmore, ♀ 20 August 1898, AB (Morley, 1907a: p. 207 as *Pezomachus gonatopinus*).

Ireland (Yu, 1998: CD-Rom).

***Gelis areator* (Panzer, 1804)**

ARMAGH: Poyntzpass, 7 October 1921, study window, WFJ (NMI) (Johnson, 1922b: p. 69 as *Hemiteles*); CAVAN (V.C. H30): no locality (RSM); CLARE (V.C. H9): no locality (RSM) (both Schwarz and Shaw, 1999: p. 125); DUBLIN: Castleknock, ♀ 17 June 1989, on the inside of a window in a suburban house, JMOC (NMI) (det. C. van Achterberg) (unpublished); KILDARE (V.C. H19): no locality (RSM); WICKLOW (V.C. H20): no locality (RSM) (both Schwarz and Shaw, 1999: p. 125); Deputy's Pass, ♀ 11 September 1932, AWS (NMI) (unpublished).

Ireland (Yu, 1998: CD-Rom).

***Gelis cinctus* (Linnaeus, 1758)**

synonym *Gelis bicolorinus* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, September, study table, WFJ (Johnson, 1922b: p. 69 as *Hemiteles bicolorinus*); DOWN: Newcastle, ♀ 13 June, WFJ (Johnson, 1929: p. 136 as *Hemiteles bicolorinus*); Rostrevor, ♀ May 1923, in study window, WFJ (Johnson, 1927: p. 159 as *Hemiteles bicolorinus*); DUBLIN: Harold's Cross, ♀ 27 August 1930, AWS (NMI) (det. JFP as *Gelis bicolorinus*) (unpublished).

***Gelis cursitans* (Fabricius, 1775)**

ARMAGH: Poyntzpass, hill, 16 September 1920, WFJ (NMI) (Johnson, 1921a: p. 105 as *Pezomachus*).

***Gelis fallax* (Förster, 1850)**

synonym *Gelis nigricornis* (Förster, 1850)

DOWN: Rostrevor, ♀ 19 May 1929, vicarage, R. G. Atkinon (Johnson Collection) (NMI) (det . JFP as *Hemiteles nigricornis*) (unpublished); WEXFORD (V.C. H12):

Ballyteige, ♂ 4 August 1950, RCF (Schwarz and Shaw, 1999: p. 130 tentatively identified).

Ireland (Yu, 1998: CD-Rom).

***Gelis hortensis* (Christ, 1791)**

CLARE: (V.C. H9): no locality (RSM); DERRY (V.C. H40): no locality (RSM); WICKLOW (V.C. H20): no locality (RSM) (all Schwarz and Shaw, 1999: p. 131).

Ireland (Yu, 1998: CD-Rom).

***Gelis kiesenwetteri* (Förster, 1850)**

CORK (V.C. H3): no locality (RSM) (Schwarz and Shaw, 1999: p. 132); MAYO: Clare Island, ♀ July 1910, CM (NMI) (Morley, 1911a: p. 11 as *Pezomachus*); WEXFORD: Enniscorthy, September, AB (Morley, 1907a: p. 187 as *Pezomachus*).

Ireland (Yu, 1998: CD-Rom).

***Gelis longicauda* (Thomson, 1884)**

KERRY (V.C. H1 or H2): no locality (RSM) (Schwarz and Shaw, 1999: p. 132).

Ireland (Yu, 1998: CD-Rom).

****Gelis mangeri* (Gravenhorst, 1815)** **New to Ireland**

synonym *Catalytus fulveolatus* (Gravenhorst, 1829)

LIMERICK: Cool Beg, Kilteely, ♂ 15 August 1934, EOM (NMI) (det. AWS as *Catalytus fulveolatus*, conf. JFP).

***Gelis melanocephalus* (Schrank, 1781)**

synonym *Pezomachus fasciatus* Fabricius, 1793

ARMAGH: Poyntzpass, 2 February 1910, in moss under pine *Pinus*, WFJ (Johnson, 1912a: p. 78 as *Pezomachus*; Johnson, 1920c: p. 66 as *Pezomachus*); CAVAN (V.C. H30): no locality (RSM) (Schwarz and Shaw, 1999: p. 134); DONEGAL: Coolmore, on roadside at Umbelliferae, WFJ (Johnson, 1915: p. 131 as *Pezomachus fasciatus* Fab); MAYO: Belclare, JNH; Louisburgh, CM (Morley, 1911a: p. 11 as *Pezomachus*); WEXFORD: Enniscorthy, AB; Kilmore, AB (Morley, 1907a: p. 234).

Ireland (Yu, 1998: CD-Rom).

***Gelis melanophorus* (Förster, 1851)**

CLARE (V.C. H9): no locality (RSM) (Schwarz and Shaw, 1999: p. 135).

Ireland (Yu, 1998: CD-Rom).

******Gelis micrurus* **(Förster, 1850)** **New to Ireland**

DUBLIN: Gollierstown, ♀ 13 July 1947, AWS (NMI) (det. AWS and conf. JFP).

***Gelis mutillatus* (Gmelin, 1790)**

synonym *Gelis vagans* (Olivier, 1792)

ARMAGH: Poyntzpass, January, in moss in wood, WFJ (Johnson, 1915: p. 15 as *Pezomachus vagans*; Johnson, 1920c: p. 66 as *Pezomachus vagans*); DOWN: Sliddery Ford, ♀ 6 September 1955, AWS (NMI) (det. JFP as *Gelis vagans*) (unpublished).

***Gelis proximus* (Förster, 1850)**

synonym *Gelis analis* (Förster, 1850)

CAVAN (V. C. H9): no locality (RSM) (Schwarz and Shaw, 1999: p. 137); KERRY: Waterville, ♀ 27 July 1901, JWY (Morley, 1902: p. 55 as *Pezomachus analis*. I am indebted to Mr Ernest A. Elliott for the determination of this species); WICKLOW: (V. C. H20): no locality (RSM) (Schwarz and Shaw, 1999: p. 137).

***Gelis ruficornis* (Retzius, 1783)**

synonym *Pezomachus tristis* Förster, 1850

DONEGAL: Coolmore, ♀ August 1917, among sallows *Salix*, WFJ (Johnson, 1918: p. 108 as *Pezomachus tristis* Fabr.).

***Gelis rufogaster* Thunberg, 1827**

synonym *Gelis carnifex* (Förster, 1850)

synonym *Gelis gracilis* (Förster, 1850)

synonym *Gelis rufulus* (Förster, 1850)

DERRY (V.C. H40): no locality (RSM) (Schwarz and Shaw, 1999: p. 138); DONEGAL: Coolmore, among sallows *Salix*, WFJ (NMI) (Johnson, 1915: p. 131 as *Pezomachus carnifex*); Portnoo, September, cliff, WFJ (NMI) (Johnson, 1919a: p. 35 as *Pezomachus carnifex* var. *rufulus* Forst); DUBLIN: The Slade of Saggart, ♀ 12 August 1936, AWS (NMI) (det JFP as *Hemiteles gracilis*); WEXFORD: Courtown

(Courten), September, AB; Kilmore, end of August and September, AB (both Morley, 1907a: pp 221-222 as *Pezomachus carnifex*); WICKLOW (V.C. H20): no locality (RSM) (Schwarz and Shaw, 1999: p. 138).

Ireland (Yu, 1998: CD-Rom).

***Gelis spinula* (Thomson, 1884)**

CAVAN (V.C. H30): Eighter, Lough Ramor, ♀ 7 June 1940, RCF (RSM) (Schwarz and Shaw, 1999: p. 139).

Ireland (Yu, 1998: CD-Rom).

***Gelis viduus* (Förster, 1850)**

DERRY (V.C. H40): no locality (RSM) (Schwarz and Shaw, 1999: p. 140).

Ireland (Yu, 1998: CD-Rom).

***Glyphicnemis atrata* (Strobl, 1901)**

synonym *Glyphicnemis suffolciensis* (Morley, 1907)

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Glyphicnemis suffolciensis*); ARMAGH: Poyntzpass, July, in field at hogweed *Heracleum*, fields, WFJ (NMI) (Johnson, 1915: p. 131 as *Glyphicnemis suffolciensis*; Johnson, 1919a: p. 35 as *Glyphicnemis suffolciensis*).

***Glyphicnemis clypealis* (Thomson, 1883)** **New to Ireland**

KILDARE: Landenstown, 21 August 1946, AWS (NMI).

***Glyphicnemis profligator* (Fabricius, 1775)**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 159 ♀); ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Phygadeuon*); Poyntzpass, August, in fields, WFJ (Johnson, 1914a: p. 65); same locality, ♀ July, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1915: p. 131); same locality, July, in stable, WFJ (Johnson, 1916: p. 20); DONEGAL: Portnoo, September, cliff, WFJ (NMI) (Johnson, 1919a: p. 35); DOWN: Dundrum, July 1926, WFJ (Johnson, 1927: p. 159 ♀); Greencastle, ♂♀ August 1930, common, WFJ (Johnson, 1931c: p. 140 as *Stylocryptus*); Rostrevor, ♀ 8 July, WFJ; Warrenpoint, ♀♀ 24, 27 and 30 July, 2 August, WFJ (NMI) (both Johnson, 1929: p. 136 as *Stylocryptus profligator* Linnaeus); GALWAY: Woodford,

♀ August 1901, JNH (Morley, 1911c: p. 20; Anon., 1913: p. 43); KERRY: Kenmare (Morley, 1907a: p. 65); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1921a: p. 17); Dundalk, ♀♀ 11, 12 and 15 July, WFJ (NMI) (Johnson, 1929: p. 136 as *Stylocryptus profligator* Linnaeus); MAYO: Clare Island, {July 1910}, several on flowers of hogweed *Heracleum*, CM (NMI); Knappagh Wood, PEG; Mulranny, PEG (Morley, 1911a: p. 10).

***Glyphicnemis vagabunda* (Gravenhorst, 1829)**

ANTRIM: Cave Hill, 31 July 1909, found on umbelliferous flowers, HLO (Johnson, 1912a: p. 78); Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 159 ♀); ARMAGH: Poyntzpass, July, in fields, WFJ (NMI); DOWN: Dundrum, ♀ July 1926 (var. *podagrica* Gravenhorst (*teste* Roman), WFJ (NMI) (Johnson, 1927: p. 159 ♀); Rostrevor, July 1922, September 1923 (NMI), WFJ (Johnson, 1923: p. 38; Johnson, 1927: p. 159 ♀); KERRY: Kenmare, ♀ 22 August 1901, JWY (Morley, 1902: p. 55 as *Stylocryptus*); WATERFORD: Cappoquin, July, JJK (Johnson, 1917a: p. 38).

***Gnotus tenuipes* (Gravenhorst, 1829)**

synonym *Hemiteles tenuicornis* Gravenhorst, 1829

DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 159 as *Hemiteles tenuicornis*).

***Helcostizus restaurator* (Fabricius, 1775)**

synonym *Helcostizus brachycentrus* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, {8} September {1921}, hill, WFJ (NMI) (Johnson, 1922b: p. 69 as *Helcostizus brachycentrus*).

***Hemiteles bipunctator* (Thunberg, 1824)**

synonym *Hemiteles cingulator* Gravenhorst, 1829

synonym *Hemiteles tristator* Gravenhorst, 1829

ANTRIM: Killead, ♂ August 1923, WFJ (Johnson, 1927: p. 159 as *Hemiteles tristator*); ARMAGH: Jerrettspass, June, on Umbelliferae at roadside, WFJ (Johnson, 1914a: p. 65 as *Hemiteles cingulator*); Poyntzpass, June, in window of house, WFJ (Johnson, 1915: p. 131 as *Hemiteles cingulator*); same locality, July 1916, in stable

window and in fields, WFJ (Johnson, 1917a: p. 38 as *Hemiteles cingulator*); same locality, June 1916, on hill, July 1916, in stable, WFJ (Johnson, 1917a: p. 38 as *Hemiteles tristator*); same locality, 6 January, in store-room, WFJ (Johnson, 1922b: p. 69 as *Hemiteles cingulator*; CAVAN (VC. H30): no locality (Schwarz and Shaw, 2000: p. 173); DONEGAL: Coolmore, September 1916, in porch of bungalow, WFJ (Johnson, 1917a: p. 38 as *Hemiteles tristator*); Portnoo, June, in house, WFJ (Johnson, 1919a: p. 35 as *Hemiteles tristator*); DOWN: Rostrevor, ♀ July 1923, in window, WFJ (Johnson, 1927: p. 159 as *Hemiteles cingulator*); same locality, ♀ 1930, in dining room window, WFJ (Johnson, 1931a: p. 54 as *Hemiteles cingulator*). There are numerous WFJ specimens in NMI.

***Hemiteles similis* (Gmelin, 1790)**

ARMAGH: Poyntzpass, July, in fields, WFJ (Johnson, 1914a: p. 65); same locality, July, in stable, WFJ (NMI) (Johnson, 1916a: p. 20); no locality (Schwarz and Shaw, 2000: p. 175 VC H30); DOWN: Greencastle, ♀ 21 August 1930, on roadside, WFJ (NMI) (Johnson, 1931c: p. 140); Newcastle, ♀ 25 October {1927}, on outside of window, (NMI), ♂ 11 May {1927}, WFJ (NMI) (Johnson, 1929: p. 136).

[*Hemiteles* sp.

MAYO: Clare Island, ♂ June 1911, WFJ (Morley, 1911a: p. 11)].

***Isadelphus armatus* (Gravenhorst, 1829)**

synonym *Hemiteles bidentulus* Thomson, 1884

DOWN: Greencastle, ♀ 16 August 1930, sandhills, WFJ (NMI) (Johnson, 1931: p. 140 as *Hemiteles bidentulus*. Dr Roman considers that this should be called *Ecthrus armatus*).

***Isadelphus gallicola* (Bridgman, 1880)**

ARMAGH: Poyntzpass, field, hill, {28} August {1920} (NMI), May, WFJ (Johnson, 1921a: p. 105 as *Cecidonomus*; Johnson, 1922b: p. 69 as *Cecidonomus*).

***Isadelphus inimicus* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♀ 31 May 1930, in dining room window, WFJ (Johnson, 1931a:

p. 54 as *Cecidonomus*).

***Leptocryptoides clavipes* (Thomson 1888)** **New to Ireland**

LEITRIM: Tullaghan, ♀ October 1937, AWS (BMNH) (det JFP).

***Lysibia nanus* (Gravenhorst, 1829)**

synonym *Lysibia fulvipes* (Gravenhorst, 1829)

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Hemiteles fulvipes*; Morley, 1907a: p. 124 as *Hemiteles fulvipes*); Poyntzpass, 8 May {1918}, emerged from dark smoky coloured cocoon, WFJ (NMI) (Johnson, 1919a: p. 35 as *Hemiteles fulvipes*); DOWN: Warrenpoint, ♀ 5 September, in dining room window facing south-east, WFJ (Johnson, 1929: p. 136 as *Hemiteles fulvipes*); KERRY: no locality (Townes, 1983: p. 173).

***Lysibia tenax* Townes, 1983**

DUBLIN: no locality (Townes, 1983: p. 172).

Ireland (Schwarz and Shaw, 2000: p. 167).

***Mastrus deminuens* (Hartig, 1838)**

synonym *Mastrus castaneus* (Taschenberg, 1865)

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Hemiteles castaneus*; Morley, 1907a: p. 137 as *Hemiteles castaneus*).

***Mastrus fumipennis* (Thomson, 1884)**

DONEGAL: Portnoo, ♀ 17 September 1918, among grass and vetches in a small meadow on the cliff, WFJ (NMI) (Johnson, 1920b: p. 10 as *Hemiteles*. Determined by Dr A. Roman; Morley, 1921: p. 53 as *Hemiteles*).

***Mastrus ridibundus* Gravenhorst, 1829**

DONEGAL: Coolmore, September, on roadside, WFJ (NMI) (Johnson, 1914a: p. 65 as *Hemiteles*); Portnoo, September, cliff, WFJ (NMI) (Johnson, 1919a: p. 35 as *Hemiteles*).

***Mastrus varicoxis* (Taschenberg, 1865)** **New to Ireland**

TIPPERARY: Aherlow, ♂ 17 September 1943, AWS (NMI) (det. JFP as *Hemiteles*).

***Medophron mixtus* (Bridgman, 1883)**

ARMAGH: Poyntzpass, June, in stable window, WFJ (Johnson, 1915: p. 131 as *Phygadeon*); DOWN: Warrenpoint, ♀ 27 July {1928), WFJ (NMI) (Johnson, 1929: p. 136 as *Phygadeuon*).

***Megacara hortulana* (Gravenhorst, 1829)**

synonym *Phygadeuon rusticellae* Bridgman, 1886

ARMAGH: Poyntzpass, Hill, {27} April {1921}, WFJ (NMI) (Johnson, 1922b: p. 69 as *Phygadeuon rusticellae* var. *subtilis* Gravenhorst).

***Megacara vagans* (Gravenhorst, 1829)**

ANTRIM: Killead, ♂ August 1923, WFJ (Johnson, 1927: p. 159 as *Phygadeuon*); DOWN: Greencastle, ♀ 22 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 140 as *Phygadeuon*); Rostrevor, ♂ 5 August 1929, WFJ; same locality, Killowen beach, ♂ 29 August 1929, Helen Craig (both Johnson, 1930: p. 157 as *Phygadeuon*).

***Mesoleptus congener* (Förster, 1876)**

Ireland (Broad, 2006).

***Mesoleptus incertus* (Förster, 1876)**

Ireland (Broad, 2006).

***Mesoleptus incessor* (Haliday, 1839)**

synonym *Mesoleptus marginatus* (Thomson, 1884)

ARMAGH: Poyntzpass, 12 August 1920, WFJ (as *marginatus*) (NMI); DOWN: Rostrevor, 16 June 1931, house, WFJ (as *marginatus*) (NMI).

***Mesoleptus laevigatus* (Gravenhorst, 1820)**

ARMAGH: Poyntzpass, in fields, August, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1921a: p. 105 as *Exolytus*); DONEGAL: Coolmore, August 1917, among sallows *Salix*, WFJ (NMI) (Johnson, 1918: p. 108 as *Exolytus*); DOWN: Greencastle, ♂ 22{21} August 1930, WFJ (NMI) (Johnson, 1931c: p. 140 as *Exolytus*); Rostrevor, ♀ 6 September 1930, in greenhouse, WFJ (NMI) (Johnson, 1931a: p. 54 as *Exolytus*. *Teste* Dr Roman); DUBLIN: Bog of the Ring, September 1902, JNH (NMI) (Morley, 1911c: p. 20 as *Exolytus*; Anon., 1913: p. 43 as *Exolytus*); LOUTH: Termonfeckin, ♂ September 1924, WFJ (NMI) (Johnson, 1927: p. 159 as *Exolytus*); WEXFORD:

Kilmore (Morley, 1907a: p. 256 as *Exolytus*).

Ireland (Jussila, 1979a: p. 42).

***Mesoleptus petiolaris* (Thomson, 1884)**

Ireland (Broad, 2006).

***Mesoleptus scrutator* (Haliday, 1839)**

DOWN: Rostrevor, ♂ 5 July 1930, in field opposite, WFJ (Johnson, 1931a: p. 54 as *Exolytus scrutator*).

Ireland (Haliday, 1839: p. 118 as *Atractodes scrutator*; Morley, 1907a: p. 256 as *Exolytus scrutator*; Fitton, 1976: p. 332 as *Atractodes scrutator*. Lectotype ♀...by fixation of Morley (1913) (NMI)).

***Mesoleptus petiolaris* (Thomson, 1884)**

ARMAGH: Poyntzpass, in fields, August, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1921a: p. 105 as *Exolytus*).

***Obisiphaga stenoptera* (Marshall, 1868)** **New to Ireland**

TIPPERARY: Aherlow, ♀ 13 September 1943, AWS (NMI) (det. AWS).

[*Oecotelma* sp.

Ireland (Townes, 1969b: p. 95 undetermined species).]

***Orthizema pullator* (Gravenhorst, 1829)**

DOWN: Newcastle, ♀ August 1926, in window, WFJ (Johnson, 1927: p. 159 as *Hemiteles*).

***Phygadeuon ambiguus* Gravenhorst, 1829**

ARMAGH: Poyntzpass, August, in fields, WFJ (NMI); DONEGAL: Coolmore, September 1916, on roadside among herbage, WFJ (NMI) (Johnson, 1917a: p. 38).

***Phygadeuon cephalotes* Gravenhorst, 1829**

DOWN: Rostrevor, ♀ 8 August 1929, field opposite, WFJ (NMI) (det. AR) (Johnson, 1930: p. 157).

***Phygadeuon dimidiatus* Thomson, 1884**

ANTRIM: Killead, ♀ August 1927: p. 159 as *Phygadeuon*); DONEGAL: Coolmore, at Umbelliferae on roadside, WFJ (Johnson, 1915: p. 131 as *Phygadeon*); DOWN:

Greencastle, ♀ 15 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140); MAYO: Lough Namucka, ♀ July 1910, JNH (NMI) (Morley, 1911a: p. 11).

***Phygadeuon dubius* (Gravenhorst, 1829)**

synonym *Phygadeuon scaposus* Thomson, 1884

ARMAGH: Poyntzpass, July, in stable window, WFJ (NMI); DONEGAL: Coolmore, on roadside among herbage, WFJ (NMI) (Johnson, 1915: p. 131 as *Phygadeon scaposus*); Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 35 as *Phygadeuon scaposus*); LOUTH: Termonfeckin ♀ July 1924, WFJ (Johnson, 1927: p. 159 as *Phygadeuon scaposus*).

***Phygadeuon dumetorum* Gravenhorst, 1829**

ARMAGH: Poyntzpass, ♂ 30 August 1909, WFJ (NMI) (Johnson, 1912a: p. 78); DONEGAL: Coolmore, {29 September 1914}, on roadside at Umbelliferae, WFJ (NMI) (Johnson, 1915: p. 131); MAYO: Clare Island, ♀ July 1910, CM (NMI) (Morley, 1911a: p. 11).

***Phygadeuon exiguus* Gravenhorst, 1829**

ARMAGH: Poyntzpass, {26} April {1918}, {12} August {1914}, herbage, sweeping in field, WFJ (NMI) (Johnson, 1915: p. 131; Johnson, 1919a: p. 35); DONEGAL: Coolmore, on roadside, WFJ (Johnson, 1915: p. 131); DOWN: Rostrevor, Victoria Square, ♀♀ 6 September 1929, WFJ (NMI) (Johnson, 1930: p. 157 both *fide* Dr A. Roman); MAYO: Clare Island, ♂ July 1910, CM (NMI) (Morley, 1911a: p. 11); WATERFORD: Stradbally, ♂ 22-30 June 1907, HWA (Morley, 1908b: p. 276).

***Phygadeuon fumator* Gravenhorst, 1829**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 159 ♀); ARMAGH: Poyntzpass, 9 March 1910, moss in wood, WFJ (NMI) (Johnson, 1912a: p. 78; Johnson, 1920c: p. 66); DONEGAL: Coolmore, {19} September {1914}, on the sandhills, WFJ (NMI) (Johnson, 1914a: p. 65); DOWN: Rostrevor, June 1923, WFJ (Johnson, 1927: p. 159 ♀); MAYO: Achill Sound, {June 1910}, WFJ (NMI); Carrowmore Hill, CM; Carrowmore Lough, CM; Clare Island, several ♂♂ {July 1910}, CM (NMI); Darby's Point, {June 1910}, WFJ (NMI) (Morley, 1911a: p. 11).

***Phygadeuon hercynicus* Gravenhorst, 1829**

synonym *Phygadeuon brevitarsis* Thomson, 1884

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 159); ARMAGH: Poyntzpass, August 1916, in fields, WFJ (NMI) (Johnson, 1917a: p. 38); DONEGAL: Coolmore, August 1912, September (NMI), on roadside among herbage, WFJ (Johnson, 1913: p. 139; Johnson, 1917a: p. 38); DOWN: Greencastle, ♀ 22 August 1930, sandhills, WFJ (Johnson, 1931c: p. 140); LAOIS (LEIX): Emo Park (BMNH) (Horstmann, 2001: p. 214 as *Phygadeuon brevitarsis*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1921a: p. 17 as *Phygadeuon brevitarsis*).

***Phygadeuon infelix* Dalla Torre, 1901**

synonym *Phygadeuon inflatus* Thomson, 1884 preoccupied

ARMAGH: Poyntzpass, ♂♀ June, August (NMI), in fields, field at angelica *Angelica*, WFJ (one of the latter had the legs dark) (Johnson, 1917a: p. 38 as *Phygadeuon inflatus*; Johnson, 1918: p. 108 as *Phygadeuon inflatus*; Johnson, 1922b: p. 69 as *Phygadeuon inflatus*); DONEGAL: Coolmore, September 1916, on wild carrot *Daucus carota*, WFJ (Johnson, 1917a: p. 38 as *Phygadeuon inflatus*); DOWN: Greencastle, ♀ 18 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Phygadeuon inflatus*); Newcastle, ♀ 9 September, WFJ (Johnson, 1929: p. 136 as *Phygadeuon inflatus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1921a: p. 17 as *Phygadeuon inflatus*).

***Phygadeuon leucostigmus* Gravenhorst, 1829**

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 159); DONEGAL: Coolmore, August 1912, WFJ (NMI) (Johnson, 1913: p. 139); Portnoo, {9} September {1918}, cliff, WFJ (NMI) (Johnson, 1919a: p. 35).

***Phygadeuon nitidus* Gravenhorst, 1829**

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 159); DONEGAL: Coolmore, September, on roadside, WFJ (NMI) (Johnson, 1914a: p. 65); MAYO: north-east Achill, ♂ June 1909, JNH (NMI); Clare Island, ♂ June 1910 {September 1910}, WFJ (NMI) (Morley, 1911a: p. 11).

***Phygadeuon ovatus* Gravenhorst, 1829**

ARMAGH: Poyntzpass, ♀ June, in a window, WFJ (Johnson, 1918: p. 108).

***Phygadeuon pallicarpus* Thomson, 1884** **New to Ireland**

LIMERICK: Limerick, ♀15 June 1913, CM (BMNH).

***Phygadeuon rotundipennis* Thomson, 1884** **New to Ireland**

CORK: Glengarriff, 26 July 1935, on shore, AWS (NMI); MAYO: The Mullet, 16 June 1936, AWS (NMI).

***Phygadeuon rugulosus* Gravenhorst, 1829**

DOWN: Newcastle, ♂♂ 23 September and 8 October, WFJ (NMI) (Johnson, 1929: p. 136).

***Phygadeuon subtilis* Gravenhorst, 1829**

synonym *Phygadeuon flavicans* Thomson, 1884

synonym *Phygadeuon oppositus* Thomson, 1844

DONEGAL: Portnoo, ♀ September, among sallows *Salix* on the roadside, WFJ (Johnson, 1920b: p. 19 determined by Dr A. Roman as *Phygadeuon oppositus*); DOWN: Newcastle, ♂♂ 9 May, 4 June, 29 September and 15 October, WFJ; Rostrevor, ♀ 14 July, WFJ (both Johnson, 1929: p. 136 as *Phygadeuon flavicans*); WICKLOW: Glending Wood, ♀ 9 October 1946, AWS (NMI) (det. JFP as *Phygadeuon oppositus*) (unpublished).

***Phygadeuon variabilis* Gravenhorst, 1829**

ARMAGH: Poyntzpass, ♂, WFJ (NMI) (Johnson, 1912a: p. 78); KERRY: Rossbeigh, HD (Morley, 1907a: p. 89); MAYO: Carrowmore Hill, on the top...at 500ft, ♂♂, CM; Mount Brown Lough, ♂♂, JNH (NMI) (Morley, 1911a: p. 11).

***Platyrhabdus inflatus* (Thomson, 1884)**

synonym *Platyrhabdus rufus* (Morley, 1907)

ARMAGH: Poyntzpass, WFJ (Johnson, 1913: p. 139 as *Phygadeuon rufus*); DUBLIN: Rockbrook, ♀ 21 October 1954, AWS (NMI) (det. JFP as *Hemiteles*).

***Polyaulon paradoxus* (Zetterstedt, 1838)**

CORK (West): Glengarriff, ♀ 31 July 1924, JNH (NMI); DOWN: Knocknagoney (K

n goney), near Holywood, ♀ probably between 1833 and 1845, AHH, det. CM (NMI); GALWAY (West): Craigamore Lough, ♀ 10 September 1928, under a stone on the shore, AWS (NMI) (Stelfox, 1946: p. 139 as *Thaumatotypus*).

***Rhembobius bifrons* (Gmelin, 1790)**

ARMAGH: Poyntzpass, {4} March {1910}, in moss, WFJ (NMI) (Johnson, 1913: p. 139 as *Microcryptus*; Johnson, 1920c: p. 66 as *Microcryptus*); KERRY: ♂ 29 July 1908, HWA (Morley, 1908b: p. 276 as *Microcryptus*); MAYO: Achill {Sound}, ♀ {June 1910}, WFJ (NMI); Clare Island, ♂ {July 1910}, CM (NMI) (Morley, 1911a: p. 10 as *Microcryptus*).

***Rhembobius perscrutator* (Thunberg, 1824)**

synonym *Acanthocryptus nigrita* Gravenhorst, 1829

DOWN: Dromore, August 1925, WFJ (NMI); Rostrevor, {18} September 1923, WFJ (NMI) (both Johnson, 1927: p. 159 as *Acanthocryptus nigrita*. ♂).

***Rhembobius quadrispinosus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {25} May {1909}, taken while running along the edge of a manure pit, WFJ (NMI) (Johnson, 1913: p. 139 as *Acanthocryptus*); DOWN: Rostrevor, ♀ 4 July 1930, field opposite, WFJ (NMI) (Johnson, 1931a: p. 54 as *Acanthocryptus*); LOUTH: Dundalk, ♂ 15 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Acanthocryptus*); MAYO: Clare Island, ♀ June 1911, WFJ (NMI) (Morley, 1911a: p. 10 as *Acanthocryptus*); WEXFORD: Kilmore, ♂ August, AB (Morley, 1907a: p. 58 as *Acanthocryptus*).

***Stilpnus* (*Polyrhembia*) *tenebricosus* (Gravenhorst, 1829)**

synonym *Atractodes vestalis* Haliday, 1839

ANTRIM: Belfast 13 June 1909, HLO (Johnson, 1912: p. 78 as *Atractodes vestalis*); ARMAGH: Poyntzpass, field, July, at hogweed *Heracleum* and in stable window, WFJ (NMI) (Johnson, 1915: p. 131 as *Atractodes*; Johnson, 1921a: p. 105 as *Atractodes*); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 139 as *Atractodes vestalis*); DOWN: Newcastle, 13 September, in window, WFJ (NMI) (Johnson, 1929: p. 136 as *Atractodes*); Rostrevor, ♂ May 1923, WFJ (NMI) (Johnson,

1927: p. 159 as *Atractodes*); same locality, ♂ 24 May 1929, river, WFJ (Johnson, 1930: p. 157 as *Atractodes*); Warrenpoint, 13 September, roadside, WFJ (Johnson, 1929: p. 136 as *Atractodes*); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (NMI) (Speight and Healy, 1977: p. 153 as *Atractodes tenebriodes*); MAYO: Louisburgh, 17 July 1910, CM (Morley, 1911a: p. 11 as *Atractodes vestalis*).

Ireland (Morley, 1907a: p. 247 as *Atractodes vestalis*. Haliday says this is a common species).

***Stilpnus* (*Stilpnus*) *blandus* Gravenhorst, 1829**

DOWN: Greencastle, ♀ 26 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 *teste* Dr Roman); Newtownards (Newtonards), oat mill, ♀ 17 October 1945, said to be very frequent in skirtings and on windows, P. M. Butler, det JFP (Richards, 1949: p. 24).

Ireland (Curtis, 1832: 388 Mr Haliday; Morley, 1907a: p. 244 Haliday; Jussila, 1987: p. 9).

***Stilpnus* (*Stilpnus*) *crassicornis* Thomson, 1884**

Ireland ({♀ Haliday Collection (NMI)} Jussila, 1987: p. 11; Jussila, 1999a: p. 109).

***Stilpnus* (*Stilpnus*) *gagates* (Gravenhorst, 1807)**

ARMAGH: Poyntzpass hill, June, WFJ (Johnson, 1914a: p. 65); Poyntzpass, October, on laurels *Prunus laurocerasus*, WFJ (NMI) (Johnson, 1921a: p. 105); DONEGAL: Coolmore, September 1916, on roadside among herbage, WFJ (NMI) (Johnson, 1917a: p. 38).

Ireland (Curtis, 1832: 388 June and August, Haliday; Morley, 1907a: p. 242 Haliday; Jussila, 1987: p. 12).

***Stilpnus* (*Stilpnus*) *pavoniae* (Scopoli, 1763)**

ARMAGH: Poyntzpass, {20} June {1914}, WFJ (NMI) (Johnson, 1913: p. 139).

Ireland (Curtis, 1832: 388 not uncommon, from June to August; Morley, 1907a: p. 243 Curtis...records as not uncommon...from June to August; Jussila, 1987: p. 13).

***Stilpnus* (*Stilpnus*) *subzonulus* Förster, 1876**

Ireland ({♂ Haliday Collection (NMI)}; Jussila, 1987: p. 11).

***Stilpnus* (*Xestophyes*) *dryadum* Curtis, 1832**

GALWAY: no locality, on oak Quercus trees, AHH (Curtis, 1832: plate 388).

***Sulcarius nigricornis* Thomson, 1884**

DUBLIN: no locality, 7 June 1942, AWS; KERRY: 20 July 1943, BPB (Townes, 1983: p. 209).

***Thaumatogelis audax* (Olivier, 1792)**

synonym *Pezomachus zonatus* Förster, 1850

DONEGAL: Coolmore, apterous ♂, at flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1915: p. 131 as *Pezomachus zonatus*); MAYO: Clare Island, ♂ {July 1910}, CM (NMI); Mulranny, winged ♂, WFJ (Morley, 1911a: p. 11 as *Pezomachus zonatus*).

***Theroscopus esenbeckii* (Gravenhorst, 1815)**

synonym *Hemiteles subzonatus* (Gravenhorst, 1815)

ARMAGH: Poyntzpass, August, in window, WFJ (Johnson, 1916a: p. 20 as *Hemiteles subzonatus*); same locality, July (NMI) in fields, January (NMI) and February in moss in a wood, WFJ (Johnson, 1917a: p. 38 as *Hemiteles subzonatus*); Johnson, 1920c: p. 66 as *Hemiteles subzonatus*)).

[*Theroscopus fasciatulus* Horstmann, 1979

synonym *Hemiteles fasciatus* Thomson, 1884

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Hemimachus fasciatus*). There is a specimen from Dublin in NMI.

Doubtfully placed species in Fitton *et al.* (1978)]

***Theroscopus hemipteron* (Riche, 1791)**

synonym *Hemiteles hemipterus* (Fabricius, 1793)

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Hemiteles hemopterus*); DOWN: Newcastle, ♂ 12 and 13 May, WFJ (NMI) (Johnson, 1929: p. 136 as *Hemiteles hemipterus*).

***Theroscopus pedestris* (Fabricius, 1775)**

DONEGAL: Portnoo shore, June, WFJ (Johnson, 1920a: p. 9 as *Hemiteles*, var.

micator Gravenhorst); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (NMI) (Speight and Healy, 1977: p. 153 as *Hemiteles*); KERRY (South): no locality, June 1902 (Saunders *et al*., 1903: p. 68 as *Hemiteles*).

***Theroscopus rufulus* (Gmelin, 1790)**

synonym *Hemiteles oxyphymus* Gravenhorst, 1829

synonym *Hemiteles politus* Bridgman, 1883

ANTRIM: Killead, ♀ August 1923, WFJ (Johnson, 1927: p. 159 as *Hemiteles oxyphimus*); DONEGAL: Coolmore, {♀ 2 September 1914}, on sandhills at thistles, WFJ (NMI) (Johnson, 1915: p. 131 as *Hemiteles politus*); Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 35 as *Phygadeuon*); DOWN: Newcastle, ♂♂ 11 {13} May {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Hemiteles oxyohinus*); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1921a: p. 17 as *Phygadeuon*. Var. *afflictor* Gravenhorst).

***Xenolytus bitinctus* (Gmelin, 1790)**

ANTRIM/DOWN: Belfast, dock warehouse, ♂♀ 11 September 1945, with the large pale clothes moth *Tinea pallescentella* Stainton (Lepidoptera: Tineidae), J. E. Cranham; warehouse, ♂♀ 18 November 1942, with the white-shouldered house-moth *Endrosis sarcitrella* (L.) (Lepidoptera: Elachistidae) and *Tinea pallescentella*, A. O'Farrell; granary, ♂♀ 2 November 1943, with *T. pallescentella*, A. O'Farrell; warehouse, ♀ 17 November 1944, with the brown house-moth *Hofmannophila pseudospretella* Stainton (Lepidoptera: Oecophoridae), A. O'Farrell; warehouse, 5♂♂ 4♀♀ 11 September 1945, with *T. pallescentella*, J. E. Cranham (Richards, 1949: p. 26 as *Phygadeuon*); DONEGAL: Coolmore, on outside of bungalow and on roadside, WFJ (Johnson, 1915: p. 131 as *Phygadeon*); DOWN: Rostrevor, ♀ 26 July 1930, field opposite, WFJ (Johnson, 1931a: p. 54 as *Phygadeuon*).

***Xiphulcus floricolator* (Gravenhorst, 1807)**

synonym *Hemiteles longulus* Thomson, 1844

ANTRIM: Killead, August 1923, WFJ (NMI); DOWN: Rostrevor, May 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Hemiteles*. ♂♀); same locality, 3♀♀ August 1930, at

the vicarage, RGA (NMI) (Johnson, 1931a: p. 53 as *Hemiteles liostylus*. This is an misidentification and is corrected in the following paper; Johnson, 1931b: p. 94 as *Hemiteles longulus*; Kerrich, 1935: p. 40 *Hemiteles longulus*).

Ireland (Morley, 1907a: p. 145 as *Hemiteles*. Beaumont).

***Zoophthorus graculus* (Gravenhorst, 1829)**

synonym *Mastrus albomarginatus* (Bridgman, 1887)

DOWN: Newcastle, ♀ October 1926, in window, WFJ (NMI) (Johnson, 1927: p. 159 as *Hemiteles albomarginatus*); Rostrevor, ♀ 10 June 1929, outside dining room window, WFJ (Johnson, 1930: p. 157 as *Hemiteles albomarginatus*).

Ireland (Beirne, 1941a: p. 676 as *Diplazon*. ♂ 4♀♀; Jussila, 1965: p. 120 as *Tymmophorus graculus graculus*).

CTENOPELMATINAE

Like the Tryphoninae this is a moderately large subfamily, whose main hosts are sawflies, and which is best represented in the north temperate regions of the world. Unlike the Tryphoninae, the species develop as endoparasites. Despite the fact that many ctenopelmatines attack important sawfly pests in forests, and that some species have been used in successful biological control programmes, the taxonomy of the subfamily has received scant attention.

The Ctenopelmatinae is represented in the British Isles by more than 200 species from about 50 genera. Unless care is taken, adult ctenopelmatines can easily be confused with tryphonines. The morphological similarities between the two groups are undoubtedly connected with their parasitism of sawflies.

Although the vast majority of ctenopelmatines are thought to develop as koinobiont internal parasites of sawfly larvae, at least one species has been reared from Eriocraniidae (Lepidoptera).

Members of the tribe Pionini have very slender ovipositors and deposit their egg in the egg of the host sawfly. In the North American species *Glyptorhaestus tomostethae* (Cushman) the egg is placed in the yolk cells of the eggs of its tenthredinid host

Tomostethus and the parasite egg or newly hatched larva thus becomes enveloped in the mesenteron of the host. About the time of host hatching the parasite larva migrates to the thoracic segments and takes up a position below the gut but above the fat body. It maintains this position during the two-week feeding period of the host. Although the *Glyptorhaestus* larva does not moult during this time it does increase greatly in size. The first instar larva has an anal vesicle, which becomes invaginated after the moult to the second instar. The host enters the ground and forms an earthen pupation chamber. The parasite larva moults to the second larval instar about the time the host enters the ground and the remainder of its development occupies about the same time as the first instar and it is full-grown and spins its cocoon in early summer. It remains quiescent until about mid September when it pupates. The adult 'emerges' in autumn but remains in the cocoon until the following spring. It is not clear if the imaginal moult takes place in the autumn or if the winter is passed as a pharate adult.

The small tribe Ctenopelmatini have Pamphiliidae as hosts. Females of some species-groups of *Ctenopelma* have slender ovipositors which lack a subapical notch and it is known that one of these species oviposits into the host egg. Other species of *Ctenopelma* oviposit into the host larva, as do the majority of species of the subfamily as a whole.

Some members of the genus *Lathrolestes* parasitise leaf miners of the sawfly tribe Fenusini and of the lepidopterous family Eriocraniidae. A female of *Lathrolestes nigricollis* (Thomson) will search the surface of birch leaves, apparently using her antennae to find mines of the host *Fenusa pusilla* (Lepeletier) and once located she uses her ovipositor to stab randomly into the mine. Oviposition is accomplished in a few seconds. Host feeding by the adult female occurs when, as a consequence of oviposition, a droplet of host haemolymph appears on the surface of the mine.

Euryproctini

***Anisotacrus tenellus* (Holmgren, 1857)** **New to Ireland**

DOWN: Tipperary Wood, ♀ 15 May 1959, AWS (NMI) (det. JFP); Tollymore Park, ♂ 12 May 1961, AWS (NMI) (det. AWS); DUBLIN: Ballynascorney, ♀ 8 May 1953,

AWS (NMI) (det. JFP).

***Euryproctus annulatus* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Tollymore Park, 27 August 1961, AWS (NMI).

***Euryproctus geniculosus* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Shankill, 20 August 1927, AAL (NMI); KILDARE: Royal Canal, 16 August 1942, AWS (NMI); WICKLOW: Coan, 23 July 1939, AWS (NMI); Murrough, 18 August 1953, AWS (NMI); The Murrough, 5 August 1942, AWS (NMI).

***Euryproctus luteicornis* (Gravenhorst, 1829)** **New to Ireland**

ARMAGH: Poyntzpass, 10 May 1914, hull, WFJ (NMI); WICKLOW: Meeting of the Waters, 19 July 1930, AWS (NMI).

***Euryproctus nemoralis* (Geoffroy, 1785)** **New to Ireland**

KILDARE: Landenstown, 27 September 1939, AWS (NMI); same locality (as Landenst'n), 28 August 1946, AWS (NMI); WICKLOW: Athdown, 30 August 1944, AWS (NMI).

***Gunomeria macrodactyla* (Holmgren, 1856)** **New to Ireland**

KERRY: Killarney, 1923, EFB (NMI); KILDARE: Rye Water, 20 July 1941, 5 July 1942 and 10 June 1953, AWS (NMI); WICKLOW: The Murrough, 5 August 1942, AWS (NMI).

***Hadrodactylus faciator* (Thunberg, 1822)**

DOWN: Rostrevor, ♀ 4 July 1930, field opposite, WFJ (NMI) (Johnson, 1931a: p. 54 as *Mesoleptus*. *Teste* Dr Roman); same locality, ♂ 13 June 1931, vicarage, WFJ (NMI) (det. AR) (unpublished).

***Hadrodactylus femoralis* (Holmgren, 1857)**

WICKLOW: no locality, ♂ 12 June 1933, JFP (BMNH) (Idar, 1975: p. 187).

***Hadrodactylus fugax* (Gravenhorst, 1829)**

DOWN: Dundrum, ♀ {29} June 1926, WFJ (NMI) (det. AR) (Johnson, 1927: p. 160 as *Mesoleius* (*Hadrodactylus*)); Rostrevor, ♀ 25 July 1931, WFJ (NMI) (det. AR) (unpublished); LOUTH: Termonfeckin, ♀ {11} July 1924, WFJ (NMI) (det. AR)

(Johnson, 1927: p. 160 as *Mesoleius* (*Hadrodactylus*)); WICKLOW: Kippure House, ♂ 20 June 1943, AWS (NMI) (det. JFP) (unpublished).

***Hadrodactylus indefessus* (Gravenhorst, 1820)**

synonym *Hadrodactylus tarsator* Thomson, 1883

ARMAGH: Poyntzpass, {9} August {1921}, in fields, WFJ (NMI) (Johnson, 1922b: p. 69 as *Mesoleptus*); DOWN: Rostrevor, ♂ 18 June 1925, mountain road, WFJ (NMI) (det. AR as *Hadrodactylus tarsator*) (unpublished).

***Hadrodactylus insignis* Kriechbaumer, 1891** **New to Ireland**

WICKLOW: Powerscourt, 19 June 1925 and 3 June 1927, AWS (NMI).

***Hadrodactylus nigrifemur* Thomson, 1883** **New to Ireland**

WICKLOW: Deputy's Pass, ♂♀ 12 June 1933, JFP (BMNH) (det. M. Idar).

***Hadrodactylus paludicola* (Holmgren, 1856)**

DUBLIN: Glenasmole, ♂♀ 30 August 1942, AWS (BMNH) (Idar, 1975: p. 184).

***Hadrodactylus tiphae* (Geoffroy, 1785)**

ARMAGH: Poyntzpass, May, {19} August {1913} (NMI) (det. CM), in fields, on Angelica, WFJ (Johnson, 1914a: p. 66 as *Mesoleptus typhae*; Johnson, 1922b: p. 69 as *Mesoleptus typhae*); DOWN: Greencastle, ♂ 16 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 140 var. *femoralis* Hmgr.); Rostrevor, ♂ June 1925, WFJ (Johnson, 1927: p. 160 as *Mesoleptus* (*Hadrodactylus*) *typhae* var. *tarsator* Thomson (*teste* Roman)); Warrenpoint, ♂ 2 August, WFJ (Johnson, 1929: p. 137 as *Hadrodactylus* (*Mesoleptus*) *typhae* Fourc. var. *femoralis* Hlmgr).

***Hadrodactylus villosulus* Thomson, 1883**

DONEGAL: Portnoo, {11} June {1918}, WFJ (NMI) (Johnson, 1919a: p. 36 as *Mesoleius*).

***Hypamblys breviusculus* (Fonscolombe, 1849)**

synonym *Hypamblys buccatus* (Holmgren, 1855)

ARMAGH: Poyntzpass, ♀ {24} May {1912}, amongst herbage on the side of the road, WFJ (NMI) (det. AR) (Johnson, 1920b: p. 20 as *Hypamblys buccatus*; Johnson, 1921b: p. 278 as *Euryproctus* (*Hypamblys*) *buccatus*); DOWN: Dundrum, ♂ {24}

June 1926, WFJ (NMI) (det. AR) (Johnson, 1927: p. 160 as *Hypamblys buccatus*); Newcastle, ♂ 28 May {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Hypamblys buccatus*); Rostrevor, ♂ June 1925, WFJ (Johnson, 1927: p. 160 as *Hypamblys buccatus*); same locality, 27 June 1929, hedge in field beside woods, WFJ (NMI) (Johnson, 1930: p. 157); LOUTH: Carlingford, ♂ 7 June 1921, in the afternoon, WFJ (NMI) (Johnson, 1921b: p. 277 as *Euryproctus* (*Hypamblys*) *buccatus*; Johnson, 1922a: pp 15, 17 as *Euryproctus* (*Hypamblys*) *buccatus*).

***Mesoleptidea cingulata* (Gravenhorst, 1829)** **New to Ireland**

DONEGAL: Portnoo, ♂ 19 June 1920, cliff, WFJ (NMI) (det. AR as *Mesoleptus*).

***Mesoleptidea prosoleuca* (Gravenhorst, 1820)**

DONEGAL: Coolmore, ♀ {30} August {1912}, on roadside, at flowers, WFJ (NMI) (Johnson, 1917a: p. 40 as *Mesoleptus*); DOWN: Newcastle, ♂ 9-19 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Mesoleptus*); Rostrevor, ♀ {29} June 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Mesoleptus*).

***Pantorhaestes xanthostomus* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Curraghard, ♂ 23 July 1961, on moor, AWS (NMI) (det. AWS and conf. JFP).

***Phobetes atomator* (Müller, 1776)**

DONEGAL: Coolmore, {28} August 1917, at wild carrot *Daucus carota*, WFJ (Johnson, 1918: p. 109 as *Euryproctus*).

***Phobetes femorator* (Thomson, 1893)** **New to Ireland**

DUBLIN: Glenasmole, ♀ 3 June 1926, AWS (NMI) (det. AR).

***Phobetes leptocerus* (Gravenhorst, 1820)**

synonym *Phobetes liopleuris* (Thomson, 1889)

ARMAGH: Poyntzpass, {6} August 1915, in field, rare (Johnson, 1917a: p. 39 as *Mesoleptus*); DOWN: Rostrevor, ♀ 4 July 1930, WFJ (NMI) (det. AR as *Phobetes liopleuris*) (unpublished).

***Syndipnus lateralis* (Gravenhorst, 1829)**

DONEGAL: Coolmore, {24 and 25 September 1914}, on the cliff at Owen's Fort, at

Umbelliferae, WFJ (NMI) (det. CM) (Johnson, 1915: p. 132 as *Euryproctus*); DOWN: Rostrevor, ♀ 4 July 1930, WFJ (NMI) (det. AR) (unpublished).

***Synodites notatus* (Gravenhorst, 1829)**

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Synodites* (*Euryproctus*); ARMAGH: Poyntzpass hill, ♂ {21} August {1915}, WFJ (NMI) (det. AR) (Johnson, 1920a: p. 10 as *Euryproctus* (*Synodyta*). A dark variety of the male); DONEGAL: Coolmore, {17 September 1913} and {29} September {1914}, on roadside, WFJ (det. CM); Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 37 as *Euryproctus*); DOWN: Rostrevor, ♀ {7} October 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Synodites* (*Euryproctus*). Var. *macula flava faciei*); same locality, 11 July, WFJ (Johnson, 1929: p. 137); LOUTH: Carlingford, {25} May {1912}, WFJ (NMI) (Johnson, 1914a: p. 66 as *Euryproctus*); Dundalk, ♂ 14 July {1927} (NMI), dark, ♀ 15 July, WFJ (Johnson, 1929: p. 137).

***Synomelix albipes* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♀ 27 June 1929, field, WFJ (NMI) (Johnson, 1930: p. 157).

Mesoleiini

***Alexeter fallax* (Holmgren, 1857)**

DOWN: Rostrevor, 3 and 4 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137); same locality, ♂ 25 July 1931, WFJ (NMI) (det. AR) (unpublished); LOUTH: Dundalk, ♂ 12 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137); Termonfeckin, ♂ {1} September 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Mesoleius* (*Alexeter*)).

****Alexeter coxalis* (Brischke, 1871)** **New to Ireland**

DUBLIN: Glenasmole, ♂ September 1937, AWS (BMNH); KILDARE: Kilkea Park, ♀ September 1937, AWS (BMNH) (det J. F. Aubert).

***Alexeter niger* (Gravenhorst, 1829)**

DOWN: Dundrum, {29} June 1926, WFJ (NMI) (det. RA); Rostrevor, September 1923, WFJ (Johnson, 1927: p. 160 as *Mesoleis* (*Alexeter*). ♂♀); Rostrevor, ♀ 14 August 1929, river, WFJ (NMI) (Johnson, 1930: p. 157); DUBLIN: Slade Brook, 14 June 1933, AWS (NMI) (det. JFP); KERRY: Slaheny Valley, 29 June 1935, AWS

(NMI) (det. JFP) (both unpublished).

***Alexeter pubescens* (Holmgren, 1857)** **New to Ireland**

DOWN: Rostrevor, ♀ 20 August 1929, WFJ (NMI) (det. RA).

***Alexeter segmentarius* (Fabricius, 1787)**

synonym *Alexeter sectator* (Thunberg, 1822)

synonym *Alexeter ruficornis* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, {16} September {1921}, in fields, WFJ (NMI) (det. RA as *Alexeter sectator*) (Johnson, 1922b: p. 69 as *Mesoleptus ruficornis* var. *comptus* Holmgren; Morley, 1911b: p. 226 as *Mesoleptus ruficornis*. 1910); DONEGAL: Portnoo, September, at flowers on roadside, WFJ (Johnson, 1919a: p. 36 as *Mesoleius ruficornis*); LOUTH: Dundalk, ♀ 15 July, WFJ (Johnson, 1929: p. 137 as *Alexeter sectator*); MAYO: Brackloon Wood, Westport, ♂ August, PEG (Morley, 1911a: p. 14 as *Mesoleptus*).

***Campodorus difformis* (Holmgren, 1876)** **New to Ireland**

DOWN: Dundrum, ♀ 17 June 1926, WFJ (NMI) (det. AR as *Mesoleius*).

***Campodorus dorsalis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass field, {19} August {1919}, at hogweed *Heracleum*, WFJ (NMI); DONEGAL: Portnoo cliff, June, WFJ (both Johnson, 1920a: p. 9 as *Mesoleius*); LOUTH: Carlingford, {16} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Mesoleius*).

***Campodorus haematodes* (Gravenhorst, 1829)**

CAVAN: Farrinseer, ♀ 8 August 1947, on alder *Alnus*, RCF (RSM) (Shaw and Kasparyan, 2003: p. 24).

***Campodorus ignavus* (Holmgren, 1857)**

LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Mesoleius*).

***Campodorus incidens* (Thomson, 1893)**

DOWN: Dromore, ♀ August 1925, WFJ (NMI); LOUTH: Termonfeckin, ♂ {12} July 1924, WFJ (NMI) (both Johnson, 1927: p. 160 as *Mesoleius*).

***Campodorus luctuosus* (Holmgren, 1857)**

DOWN: Dundrum, ♂♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Mesoleius*).

***Campodorus maculicollis* (Stephens, 1835)**

MAYO: Carrowmore Hill, on the top at 500ft, ♀ 19 July 1910, CM (Morley, 1911a: p. 13 as *Mesoleius*; Morley, 1911b: p. 162 as *Mesoleius*. A female, differing in its stramineous anterior coxae and trochanters, and concolorous pronotum and humeral marks).

***Campodorus molestus* (Holmgren, 1857)**

WEXFORD: Courtown (Courten), early in September 1893, AB (Morley, 1911b: p. 156 as *Mesoleius*).

***Campodorus scapularis* (Stephens, 1835)**

DOWN: Dundrum, ♀ {10} June 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Mesoleius*).

***Campodorus viduus* (Holmgren, 1857)** **New to Ireland**

DUBLIN: Harold's Cross, 10 June 1954, AWS (NMI).

***Himerta defectiva* (Gravenhorst, 1820)** **New to Ireland**

CAVAN: Sloan's Fort, Cornafean, 7 June 1936, RCF (NMI); DONEGAL: Portnoo, 17 and 19 June 1918, WFJ (NMI); KILDARE: Royal Canal, 12 July 1942, AWS (NMI); WICKLOW: Glenmacnass, 3 August 1930, AWS (NMI).

***Himerta sepulchralis* (Holmgren, 1876)**

DONEGAL: Milford near Letterkenny, 28 specimens emerged 1883 from 310 *Zaraea* (now *Abia*) (Hymenoptera: Cimbicidae) cocoons collected in 1882, J. A. Osborne (Osborne, 1884: p. 128; Morley, 1911b: p. 142 as *Mesoleius*); Portnoo, ♂ 11 June 1919, WFJ (NMI) (det. AR as *Barytarbes*); WATERFORD: Maghgiha, Dungarvan, ♂ 4 August 1928, AWS (NMI) (det. AWS) (both unpublished).

Ireland (Yu, 1998: CD-Rom).

***Lagarotis debitor* (Thunberg, 1824)**

synonym *Lagarotis insolens* (Gravenhorst, 1829)

DONEGAL: Portnoo, {11} September {1918}, at wild carrot *Daucus carota*, WFJ

(NMI) (Johnson, 1919a: p. 36 as *Mesoleius semicaligatus* var. *insolens*); DOWN: Tollymore Park, ♂ 25 September 1962, AWS (NMI) (det. AWS); KILDARE: Newbarry, ♂ 30 September 1951, AWS (NMI) (det. AWS) (both unpublished); LOUTH: Termonfeckin, ♂ July 1924, WFJ (Johnson, 1927: p. 160 as *Mesoleius* (*Lagarotus*) (*insolens*)).

***Lagarotis erythrocerus* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♂ {7} September 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Mesoleius* (*Lagarotus*)).

***Lagarotis semicaligata* (Gravenhorst, 1820)**

ANTRIM: Ballycastle, September 1901, Tomlin (Morley, 1911b: p. 146 as *Mesoleius*); ARMAGH: Poyntzpass, {31} July {1913} and August, in fields, WFJ (NMI) (Johnson, 1914a: p. 66 as *Mesoleius*); DONEGAL: Coolmore, {21} August and {16 and 29} September 1912, WFJ (NMI) (Johnson, 1913: p. 140 as *Mesoleius*); Portnoo, September 1917, at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1918: p. 109 as *Mesoleius*); DOWN: Newcastle, ♂ 17 August 1927, WFJ (NMI) (det. AR) (unpublished); Rostrevor, ♂ 14 September 1929, field opposite, WFJ (Johnson, 1930: p. 157 as *Lagarotus*); MAYO: Achill {Sound}, ♀ June 1911, WFJ (NMI) (Morley, 1911a: p. 13 as *Mesoleius*).

***Lamachus virgultorum* (Gravenhorst, 1829)**

LOUTH: Carlingford, {3 and 20} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Mesoleius*).

****Mesoleius amabilis* Holmgren, 1857** **New to Ireland**

LOUTH: Carlingford, ♀ 29 June 1921, WFJ (NMI) (det. AR).

***Mesoleius armillatorius* (Gravenhorst, 1807)**

MAYO: Carrowmore Lough {Louisburg}, ♂ {16 July 1910}, on reeds, CM (NMI) (Morley, 1911a: p. 13).

***Mesoleius aulicus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, May and June, in field, WFJ (Johnson, 1913: p. 140; Johnson, 1917a: p. 39); Poyntzpass lane, {5} July {1919}, WFJ (NMI) (Johnson,

1920a: p. 9); DONEGAL: Portnoo, cliff, June, WFJ (Johnson, 1919a: p. 36; Johnson, 1920a: p. 9); MAYO: Carrowmore Hill, CM; Clare Island, {July 1919}, CM (NMI) (Morley, 1911a: p. 13).

***Mesoleius melanoleucus* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♀ {3, 4, 17, 23 and 24} June 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Mesoleius*).

[*Mesoleius opticus* (Gravenhorst, 1829)

?Ireland (Shaw and Kasparyan, 2003: p. 22 no locality data but label in green ink. 1♂, ex sawfly on *Salix*, larvae coll. August/September 1947, emerged 30 June 1948 (R. C. Faris) (RSM)).]

***Mesoleius peronatus* (Marshall, 1876)**

WICKLOW: Athdown (Ashdown), ♀ emerged 13 May 1949, ex the sawfly *Nematus cadderensis* Cameron (Hym., Tenthredinidae) on birch *Betula*, larva coll. 26 September 1948, RCF (RSM) (Shaw and Kasparyan, 2003: p. 22).

[*Mesoleius proscatorius* Gravenhorst

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256). This species name could not be traced]

***Perispuda bignellii* (Bridgman, 1881)**

Ireland: Broad (2006).

***Perispuda sulphurata* (Gravenhorst, 1807)**

ANTRIM: Belfast, HLO (NMI) (det. CM) (Johnson, 1915: p. 132); DONEGAL: Coolmore, {4} September {1915}, on the wing, WFJ (NMI) (Johnson, 1916a: p. 21); Portnoo, {6} September 1917, at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1918: p. 109); MAYO: Louisburgh, ♂ 17 July {1910}, CM (NMI) (Morley, 1911a: p. 14 as *Nerispudus* (mispelling)).

***Protarchus testatorius* (Thunberg, 1824)**

synonym *Protarchus rufus* (Gravenhorst, 1829)

WICKLOW: Lough Dan, ♀ September 1908, JNH (NMI) (Morley, 1911c: p. 20 as *Prolarchus rufus*; Anon., 1913: p. 43 as *Prolarchus* (mispelling) *rufus*).

***Rhinotorus compactor* (Thunberg, 1824)** **New to Ireland**

WESTMEATH: Ballyhealy, 26 May 1940, AWS (as *Trematopygus compactor*) (NMI).

***Scopesis bicolor* (Gravenhorst, 1829)**

DONEGAL: Portnoo, {21} September 1917, at wild carrot *Daucus carota*, WFJ (Johnson, 1918: p. 109 as *Mesoleius*); DOWN: Newcastle, ♀ 30 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Scopesus*).

***Scopesis fraterna* (Holmgren, 1857)**

ARMAGH: Poyntzpass, 24 July, 19, 15 and 14 August 1920, in fields flying along the hedgerow, WFJ (NMI) (Johnson, 1921a: p. 104 as *Mesoleius*).

***Scopesis frontator* (Thunberg, 1824)**

synonym *Scopesis rufolabris* (Zetterstedt, 1838)

DONEGAL: Coolmore, {1 (det. CM), 7 and 16} September {1915}, at Umbelliferae, WFJ (Johnson, 1916a: p. 20 as *Mesoleius rufolabris*).

***Scopesis gesticulator* (Thunberg, 1824)**

synonym *Mesoleius nigricollis* (Gravenhorst, 1829)

DONEGAL: Portnoo, September 1917, WFJ (Johnson, 1918: p. 109 as *Mesoleius nigricollis*); WICKLOW: Blessington, ♂ 23 August 1942, AWS (NMI) (det. AWS) (unpublished).

***Scopesis macropus* (Thomson, 1893)**

DOWN: Newcastle, ♂ 17 August, WFJ (Johnson, 1929: p. 137 as *Scopesus*).

***Scopesis rufonotata* (Holmgren, 1876)**

DONEGAL: Coolmore, September 1916, among sallows *Salix*, WFJ (Johnson, 1917a: p. 39 as *Mesoleius*); DOWN: Newcastle, ♂ 9 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Scopesus*); LOUTH: Carlingford, {17} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Mesoleius*).

***Scopesis tegularis* (Thomson, 1893)**

DOWN: Newcastle, ♂♂ 17, 27 (NMI) (det. AR) and 30 August, WFJ (Johnson, 1929: p. 137 as *Scopesus*. Var. with yellow markings on shoulders).

Perilissini

***Absyrtus vicinator* (Thunberg, 1824)**

synonym *Absyrtus luteus* Holmgren, 1859

ARMAGH: Poyntzpass, October, WFJ (Morley, 1915: p. 304 as *Absyrtus luteus*); KERRY: Killarney, EFB July 1926 and June 1929, EFB (NMI) (det. AWS) (unpublished).

***Lathrolestes clypeatus* (Zetterstedt, 1838)** **New to Ireland**

WICKLOW: Drumdangan, ♂ 24 April 1949, AWS (NMI) (det. JFP).

***Lathrolestes macropygus* (Holmgren, 1855)** **New to Ireland**

KILDARE: Skerries Bog, ♂ 26 September 1946, AWS (NMI) (det. JFP).

***Lathrolestes nigricollis* (Thomson, 1883)**

synonym *Lathrolestes minutus* (Bridgman, 1888)

LOUTH: Carlingford, May, WFJ (Johnson, 1913: p. 140 as *Perlissus minutus*).

***Lathrolestes orbitalis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {24} May {1912}, WFJ (NMI) (Johnson, 1913: p. 140 as *Perlissus*).

***Lathrolestes verticalis* (Brischke, 1871)** **New to Ireland**

synonym *Lathrolestes marginatus* (Thomson, 1883)

WICKLOW: Athdown, 2 October 1954, AWS (as *marginatus*) (NMI).

***Oetophorus naevius* (Gmelin, 1790)**

synonym *Perilissus limitaris* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, ♂ 24 May 1912, WFJ (NMI) (det. AR as *Perilissus*) (unpublished); MAYO: Clare Island, one specimen July 1910, CM (NMI as *Perilissus limitaris*) (Morley, 1911a: p. 14 as *Perilissus*).

***Opheltes glaucopterus* (Linnaeus, 1758)**

FERMANAGH: near Clareview, ♀ late June 1977, flying over wet meadow, RA (UM) (Boston, 1985b: p. 507).

Ireland (Yu, 1989: CD-Rom).

***Perilissus lutescens* Holmgren, 1857** **New to Ireland**

DONEGAL: Coolmore, 22 September 1916, WFJ (NMI); DUBLIN: Glenasmole, 10 September 1947, AWS (NMI); KILDARE: Royal (R.) Canal, 14 June 1949, AWS (NMI); SLIGO: Trawalua, 2 and 7 August 1938, AWS (NMI); WICKLOW: Killoughter, 21 June 1951, AWS (NMI); Woodend, 10 August 1950, AWS (NMI).

***Perilissus rufoniger* (Gravenhorst, 1820)**

ANTRIM: Giant's Ring near Belfast, ♀ 29 May 1909, HLO (Johnson, 1912a: p. 79); ARMAGH: Jerrettspass, {16} June {1913}, on Umbelliferae on roadside, WFJ (NMI) (Johnson, 1914a: p. 66 var. *vernalis* Gravenhorst. This variety has the abdomen pale from apex of first to base of fifth segments); Poyntzpass, July, WFJ; DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 140 as *Perlissus*); DOWN: Rostrevor, ♂ {1} October 1925, WFJ (NMI) (Johnson, 1927: p. 160).

***Perilissus spilonotus* (Stephens, 1835)** **New to Ireland**

synonym *Perilissus subcinctus* Holmgren, 1857

synonym *Perilissus dissimilis* Woldstedt, 1878

ANTRIM: Bushfoot, 4 June 1938, AWS (as *subcinctus*) (NMI); DUBLIN: Clondalkin (C'l'd'k), 13 July 1941, AWS (as *dissimilis*) (NMI); Glenasmole, 17 July 1942, AWS (as *dissimilis*) (NMI); KILDARE: Landenstown, 7 August 1941, AWS (as *dissimilis*) (NMI); Royal (R.) Canal, 11 July 1943 and 18 June 1944, AWS (as *dissimilis*) (NMI).

***Perilissus variator* (Müller, 1776)**

synonym *Perilissus filicornis* (Gravenhorst, 1820)

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Perilissus filicornis*. ♂♀); ARMAGH: Poyntzpass, August, in fields, WFJ (Johnson, 1914a: p. 66 as *Perilissus filicornis*); DONEGAL: Coolmore, August 1912, WFJ (Johnson, 1913: p. 140 as *Perlissus filicornis*); same locality, ♀ {2 September 1914}, at flowers on roadside, WFJ (NMI) (Johnson, 1915: p. 132 as *Perilissus filicornis*); Portnoo, {10} June {1919}, WFJ (NMI) (Johnson, 1919a: p. 37 as *Perilissus filicornis*); DOWN: Newcastle, ♂ 19 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Perilissus filicornis*); Rostrevor, June 1924 and 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Perilissus filicornis*. ♂♀); MAYO: Mulranny, PEG; Westport, July, JNH

(Morley, 1911a: p. 14 as *Perilissus filicornis*); SLIGO: Rosses Point, June {1905}, WFJ (NMI) (Johnson, 1913: p. 140 as *Perilissus filicornis*).

Pionini

***Lethades cingulator* Hinz, 1976**

Ireland (Hinz, 1996: p. 273; Yu, 1998: CD-Rom; Jussila, 2001a: p. 119)

***Pion fortipes* (Gravenhorst, 1829)**

ANTRIM: Cave Hill, 1910, HLO (Johnson, 1912a: p. 79 as *Catoglyptus*; Morley, 1911b: p. 235 as *Catoglyptus*); ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Catoglyptus*); Poyntzpass, 26 June 1907, WFJ (Johnson, 1912a: p. 79 as *Catoglyptus*; Morley, 1911b: p. 235 as *Catoglyptus*); DONEGAL: Portnoo, {27} June {1919}, WFJ (NMI) (Johnson, 1919a: p. 36 as *Catoglyptus*. Var. *crassipes* Holmgren, in this variety the hind femora are nearly or entirely black instead of red. I took several in June on the bog road and elsewhere); DOWN: Dundrum, {5, 9 and 18} June 1926, very common, WFJ (NMI); Rostrevor, June 1923, 1924 and 1925, WFJ (NMI); same locality, ♀ June 1925, var. *crassipes*, WFJ (NMI) (both Johnson, 1927: p. 160 as *Catoglyptus*. ♂♀); LOUTH: Carlingford, {25} May {1912}, also June 1921, very abundant, flying among the bracken *Pteridium* along the field path, WFJ (NMI) (Johnson, 1913: p. 140 as *Catoglyptus*; Johnson, 1922a: pp 15, 17 as *Catoglyptus*); Termonfeckin, June 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Catoglyptus*. ♂♀); Warrenpoint, ♂ 20 June, WFJ (Johnson, 1929: p. 137 as *Catoglyptus*).

***Rhaestus rufipes* (Holmgren, 1857)** **New to Ireland**

WICKLOW: Athdown, ♀ 10 June 1933, JFP (BMNH) (det. J. F. Aubert).

***Rhorus glaber* (Bridgman, 1886)**

ARMAGH: Poyntzpass, {28} July {1917}, in field, WFJ (NMI) (Johnson, 1918: p. 109 as *Prionopoda glabra*).

***Rhorus longicornis* (Holmgren, 1858)**

synonym *Rhorus fasciatus* (Gravenhorst, 1829)

DONEGAL: Portnoo, cliff, June, WFJ (Johnson, 1921a: p. 107 as *Erromenus fasciatus*).

***Rhorus neustriae* (Schrank, 1802)**

DOWN: Dundrum, ♂ {17} June 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Monoblastus*).

***Rhorus palustris* (Holmgren, 1857)** **New to Ireland**

DOWN: Drinnahily, 14 July 1964, AWS (NMI); Tollymore (Pk) Park, 9 and 24 June 1957, AWS (NMI); DUBLIN: St Anne's, Clontarf, 15 June 1937, EOM (NMI); KILDARE: Carton, 30 May 1948, AWS (NMI); Royal Canal, 30 June 1950, AWS (NMI).

***Rhorus punctus* (Gravenhorst, 1829)** **New to Ireland**

synonym *Rhorus mesoxanthus* (Gravenhorst, 1829)

KERRY: Killarney, July 1928, EFB (as *mesoxanthus*) (NMI).

***Sympherta antilope* (Gravenhorst, 1829)**

DOWN: Dundrum, ♂ {24} June 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Catoglyptus* (*Stiphrosomus*)).

***Sympherta obligator* (Thunberg, 1824)** **New to Ireland**

synonym *Sympherta fuscicornis* (Gmelin, 1790)

DUBLIN: Glenasmole, ♀ 7 July 1937, under stone at *circa* 1220ft north of, AWS (NMI) (det. AWS and JFP as *Sympherta fuscicornis*).

***Sympherta splendens* (Strobl, 1903)** **New to Ireland**

DOWN: Rostrevor, ♂ 18 June 1925, WFJ (NMI) (det. AR).

***Sympherta ullrichi* (Tschek, 1869)** **New to Ireland**

WICKLOW: Deputy's Pass, ♀ 12 June 1933, JFP (BMNH).

***Syntactus minutus* (Bridgman, 1886)** **New to Ireland**

DOWN: Newcastle, 25 May 1927, WFJ (NMI).

***Trematopygus vellicans* (Gravenhorst, 1829)**

synonym *Trematopygus ruficornis* (Zetterstedt, 1838)

ARMAGH: Poyntzpass, {21} August {1915} and {27} August {1917}, on hill, scarce, WFJ (NMI) (Johnson, 1917a: p. 39); WESTMEATH: Riverdale, 18 June 1939, AWS (as *ruficornis*) (NMI); WICKLOW: Powerscourt Deerpark, 29 May 1927,

AWS (as *ruficornis*) (NMI).

Scolobatini

***Scolobates auriculatus* (Fabricius, 1804)** **New to Ireland**

CORK: Glengarriff, 13 July 1924, AWS (NMI); KERRY: Killarney, July 1930, L. (Lake) Shore, EFB (NMI).

CYLLOCERINAE

This is a very small subfamily which includes only the four genera *Cylloceria*, *Allomacrus*, *Hyperacmus* and *Sweaterella*. It is Holarctic and Neotropic in distribution. Little is known of the biology of this group although there are host records for a few species of *Cylloceria*, which have been reared from *Tipula* (Diptera, Tipulidae). There is also one unconfirmed record of the genus *Hyperacmus* from a stratiomyid.

***Allomacrus arcticus* (Holmgren, 1880)** **New to Ireland**

ANTRIM: Rea's Wood, f 5-11 June 1985, Malaise trap, MRB and RN (NMI) (det. MRB).

***Cylloceria caligata* (Gravenhorst, 1829)**

DOWN: Newcastle, August, on sandhills, WFJ (Johnson, 1913: p. 140 as *Lampronota caligata*); same locality, ♂ 27 August, WFJ (Johnson, 1929: p. 136 as *Lampronota caligata*);

***Cylloceria melancholica* (Gravenhorst, 1829)**

synonym *Lampronota crenicornis* Curtis, 1832

DOWN: Holywood, July-September, AHH (Haliday, 1839: p. 121 as *Lampronota crenicornis*. Not uncommon; Morley, 1908a: p. 255 as *Lampronota caligata* [wrong synonymy]); MAYO: Louisburgh, ♂ {13 July 1910}, swept in peat bog, CM (Morley, 1911a: p. 13 as *Lampronota*).

Ireland (Morley, 1913: p. 263 as *Lampronota crenicornis*. Type (a dissected male) selected...twelve English and Irish males and females; Fitton, 1976: p. 323 as *Lampronota crenicornis*. Lectotype ♀, paralectotype ♂ (Haliday Collection) (NMI).

Morley's "type" has no status).

[***Lampronota denticornis* Haliday, 1839 nomen nudum**

Ireland (Haliday, 1838: p. 121 as *Lampronota denticornis*; Morley, 1908a: p. 258 Haliday's *L. denticornis* which is only doubtfully synonymous [with *Lampronota accusator* Fabricius], was found by him in pine woods in Ireland during the autumn; Fitton, 1976: p. 334 as *Lampronota denticornis*. Lectotype ♀...(NM)).

***Hyperacmus crassicornis* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Slade of Saggart, 16 October 1935, AWS (NMI).

DIACRITINAE

This very small, but widely distributed subfamily comprises a handful of species in three genera *Diacritus*, *Ortholaba* and *Cressonia*. The Diacritinae is one of the few subfamilies whose biology is more-or-less completely unknown.

***Diacritus aciculatus* (Vollenhoven, 1878)**

ANTRIM: Rea's Wood, ♀, 10 July 1985 MRB and RN (UM) (det. MRB and RN); CORK: Fota, ♀ 25 July 1996, KGB (UM) (det. MRB and RN); WICKLOW: Enniskerry, 2♂♂ emerged 26 June 1931, ex log, AWS (NMI) (det. AWS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 92).

DIPLAZONTINAE

The Diplazontinae is one of the smaller subfamilies with 18 genera. It is world-wide in distribution but the majority of species are found in the north temperate zone. Twelve genera are represented in the British Isles, by about fifty species. One species, *Diplazon laetatorius* (Fabricius), may well be the most common and widely distributed ichneumonid, occurring all over the world, from the far north of Europe to tropical Pacific islands. It is normally thelytokous, although some North American populations include males.

Members of this subfamily are easily distinguished from other ichneumonids by

their general appearance. Should there be any doubt, the main confirmatory characters are the bifid upper tooth of the mandible and the sub-rectangular shape of the first tergite of the metasoma.

Diplazontines attack aphidophagous hoverflies (Diptera: Syrphidae). Until fairly recently the reliable, published biological data strongly suggested them to be specialized parasites of only this group of hosts. However, one *Bioblapsis* species parasitises mycophagous hoverfly and another is associated with a hoverfly associated with sap flows on deciduous trees. Oviposition is into the host larva, or less often into the egg, and emergence of the adult is from the host puparium. Although the host forms a puparium the parasite larva prevents the actual transformation to a pupa.

In *Diplazon*, *Syrphoctonus* and *Syrphophilus* females bring the metasoma forward beneath the thorax and insert the ovipositor into the host without selecting a particular site. The species of these genera usually oviposit into young host larvae and in some cases also into the egg. They will, however, only oviposit into eggs containing well-developed embryos (those more than about 48 hours old). The egg is deposited directly into the haemocoel and the parasite larva lives free in the haemolymph. Females of *Syrphoctonus pictus* (Gravenhorst) oviposit into all host larval instars. In *Enizemum ornatum* (Gravenhorst), which selects only older larvae, a more complex sequence of events leads up to oviposition: after antennal contact the female mounts the larva, stabs with its ovipositor and bites with its mandibles. This causes the host to raise its anterior end, after which the female rapidly inserts her ovipositor just behind the host's mouthparts. The species with complex oviposition behaviour and/or which attack older larvae appear also to have more restricted host ranges. Usually only a single egg is deposited but in all cases of super- or multi-parasitism only one individual survives. The first instar larvae have large mandibles and have been observed to fight. Development from egg to adult takes about three weeks in summer and many species are multivoltine. Overwintering takes place in the first larval instar within a host larva or as a pupa within a host puparium.

The adult diplazontine escapes from the host puparium by cutting a neat circular

hole near its anterior end; successive semicircular strips are removed, with the mandibles, from around the edge of the hole until it is large enough for the adult to emerge. Adults are active from March to November and females commonly occur near aphid colonies, searching for hosts or feeding on syrphid eggs and larvae or aphid honeydew. The eggs devoured are often those detected, by ovipositor insertion, as being too young for oviposition. Predation of host eggs and larvae supplies proteins necessary for continued egg production. Males of some species form swarms beneath the canopies of large trees.

***Campocraspedon annulitarsis* (Hedwig, 1938)**

synonym *Campocraspedon arcanus* (Stelfox, 1941)

WICKLOW: Devil's Glen, holotype ♂ 8 June 1921, AWS (USNM) (Stelfox, 1941: p. 110 as *Homocidus arcanus*; Fitton, 1976: p. 348 as *Homocidus arcanus*); Killegar, 2♂♂ (cotypes) 25 May 1924, AWS (NMI) (Stelfox, 1941: p. 110 as *Homocidus arcanus*).

Ireland (Beirne, 1941a: p. 685 as *Diplazon arcanus*. 2♂♂).

***Campocraspedon caudatus* (Thomson, 1890)**

ARMAGH: Poyntzpass, {9} June {1916}, on hill, WFJ (NMI) (Johnson, 1915: p. 132 as *Homocidus*); DONEGAL: Portnoo, September 1917, at wild carrot *Daucus carota*, WFJ (Johnson, 1918: p. 109 as *Homocidus*); TYRONE: Moy, ♂♂ 2 June 1985, hawthorn *Crataegus* herbacous verge, MRB (UM) (det. MRB and RN) (unpublished).

Ireland (Beirne, 1941a: p. 683 as *Diplazon*. ♀).

***Diplazon annulatus* (Gravenhorst, 1829)**

synonym *Diplazon multicolor* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, August 1916, in field, rare, WFJ (Johnson, 1917a: p. 39 as *Bassus multicolor*); CARLOW: Cloughristick, ♂♂ 19 June 1982, JMOC (NMI) (det. MRB) (unpublished); DOWN: Dromore, August 1925, WFJ (NMI); Dundrum, August 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Bassus*); Greencastle, ♂ 22 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Bassus*); Rostrevor, 20 and 21 June 1929, 15 August 1929, grass plot, WFJ (Johnson, 1930: p.157 as *Bassus*);

Warrenpoint, ♀ 20 June {1928}, WFJ (NMI) (Johnson, 1929: p. 136 as *Bassus*); LOUTH: Dundalk, ♂ 14 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Bassus*). Ireland (Beirne, 1941a: p. 678 2♂♂♀; Stelfox, 1941: p. 118 as *Bassus*. Appears to be very widespread throughout Ireland; Jussila, 1965: p. 122).

***Diplazon deletus* (Thomson, 1890)**

CARLOW: Cloughristick, ♂ 19 June 1982, JMOC (NMI) (det. MRB) (unpublished). Ireland (Beirne, 1941a: p. 678 ♀).

***Diplazon laetatorius* (Fabricius, 1781)**

CAVAN: Cuilcagh Lake, ♂ 21 August 1982, swept from lakeside vegetation, JMOC (NMI) (det. MRB) (unpublished); DOWN: Greencastle, ♀♀ 16 and 22 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Bassus*); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (NMI) (det. AWS) (Speight and Healy, 1977: p. 153); same locality, ♀ 14 September 1985, swept in the alder *Alnus* marsh, JPOC (NMI) (det. MRB) (unpublished).

Ireland (Morley, 1911b: p. 83 as *Bassus*. According to his Ms in the Dublin Museum, found commonly by Haliday in Ireland).

***Diplazon neoalpinus* Zwakhals, 1979**

synonym *Diplazon alpinus* (Holmgren, 1858) preoccupied

CARLOW: Cloughristick, ♀ 19 June 1982, JMOC (NMI) (det. MRB) (unpublished); DUBLIN: no locality {Glenasmole, ♀ 24 June 1938, AWS} (NMI); WICKLOW: no locality {Glendalough, 4 June 1937, AWS} (NMI) (Stelfox, 1941: p. 117 as *Homocidus alpinus*. ♀♀ rare, but ♂♂ sometimes very abundant, assembling around the lower branches of conifers in May and early June).

Ireland (Beirne, 1941a: p. 682 4♂♂♀).

***Diplazon pectoratorius* (Thunberg, 1824)**

synonym *Diplazon pectoratorius* (Gravenhorst, 1829) preoccupied

ARMAGH: Poyntzpass, June, flying among herbage by roadside, WFJ (Johnson, 1913: p. 140 as *Homocidus*); CARLOW: Cloughristick, ♀ 19 June 1982, JMOC (NMI) (det. MRB); CAVAN: Virginia, ♂ 30 May 1982, JMOC (NMI) (det. MRB)

(both unpublished); DONEGAL: Coolmore, September, among sallows *Salix*, WFJ (Johnson, 1916a: p. 20 as *Homocidus*); DOWN: Newcastle, ♂♂ 25 May {1927} and 9 June (corrected by AWS from July), ♂ 18 May {1927}, var. *nigrithorax* Strobl, WFJ (NMI) (Johnson, 1929: p. 137 as *Homocidus*); Rostrevor, ♂ {26} June 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Homocidus*); GALWAY: Diamond Hill, Letterfrack, ♂ 22 July 1982, swept on a bog, JMOC (NMI) (det. MRB); Rosleague House, Letterfrack, ♂ 24 July 1982, swept in mixed wood, JMOC (NMI) (det. MRB) (both unpublished); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Homocidus*).

Ireland (Morley, 1911b: p. 93 as *Homocidus*. Haliday's diary, in Dublin Museum, records it commonly from Ireland; Beirne, 1941a: p. 682 5♂♂; Townes *et al*., 1965: p. 411).

***Diplazon tetragonus* (Thunberg, 1824)**

synonym *Diplazon tricinctus* (Gravenhorst, 1829)

ANTRIM: Killead, ♂ August 1923, WFJ (Johnson, 1927: p. 160 as *Bassus tricinctus* var. *nemoralis* Holmgren); ARMAGH: Poyntzpass, May, June, {30} September {1921}, on hill, in house, field, WFJ (NMI) (Johnson, 1915: p. 132 as *Bassus tricinctus*; Johnson, 1922b: p. 69 as *Bassus tricinctus* var. *nemoralis* Holmgren); DONEGAL: Coolmore, at wild carrot *Daucus carota* on roadside, WFJ; DOWN: Rostrevor, ♂ 6-9 July, WFJ (Johnson, 1929: p. 136 as *Bassus tricinctus*); LOUTH: Bellurgan, June, var. *nemoralis*, on sea shore, WFJ (Johnson, 1915: p. 132 as *Bassus tricinctus*); MAYO: Carrowmore Hill, at 500ft, CM; Clare Island, not uncommon, WFJ and CM (Morley, 1911a: p. 13 as *Bassus tricinctus*); WEXFORD: Kilmore, AB (Morley, 1911b: p. 84 as *Bassus tricinctus*).

Ireland (Beirne, 1941a: p. 680 6♂♂4♀♀; Townes *et al*., 1965: pp 411-412).

***Diplazon tibiatorius* (Thunberg, 1824)**

synonym *Diplazon albosignatus* (Gravenhorst, 1829)

DOWN: Newcastle, August 1926, WFJ (Johnson, 1927: p. 160 as *Bassus albosignatus* var. c, Thomson O. E. 1467).

Ireland (Morley, 1911b: p. 86 as *Bassus albosignatus*. Haliday, in his Dublin Museum MS., says it was found commonly by him in Ireland).

***Diplazon varicoxa* (Thomson, 1890)**

ANTRIM: Killead, ♂ August 1923, WFJ (Johnson, 1927: p. 160 as *Bassus variicoxa*); ARMAGH: Poyntzpass, August, in field among herbage, WFJ (Johnson, 1916a: p. 20 as *Bassus*); DONEGAL: Coolmore, on sandhills at thistles, WFJ (Johnson, 1915: p. 132 as *Bassus*); Portnoo shore, June, WFJ (Johnson, 1920a: p. 9 as *Bassus variicoxa*); DOWN: Warrenpoint, ♀ 2 August {3 July 1928}, WFJ (NMI) (Johnson, 1929: p. 136 as *Bassus variicoxa*); LOUTH: Carlingford, June 1921, in numbers at a bed of thistles on the shore, WFJ (Johnson, 1922a: p. 15 as *Bassus variicoxa*; p. 17).

Ireland (Beirne, 1941a: p. 679 2♂♂; Stelfox, 1941: p. 118 as *Bassus*. While in Ireland *varicoxa* is much more local and rare [than *annulatus*]).

***Enizemum ornatum* (Gravenhorst, 1829)** **New to Ireland**

CORK: Monagurra Lough, Ballycotton Bay, ♀ 24 August 1976, margin of brackish ditch on dune slack, RA (UM) (det. MRB and RN); TIPPERARY: Ballinacourty House (Ho.), Glen of Aherlow, 19 September 1943, (AWS collection) (BMNH); WICKLOW:Enniskerry, ♀ 25 July 1935, JFP (BMNH).

***Phthorima compressa* (Desvignes, 1856)**

ANTRIM: Rea's Wood, ♂ 30 May 1975, RN (UM) (unpublished); DUBLIN: Saggart {20 June 1943, AWS} (NMI); KILDARE: Landenstown, {♂ 14 August 1949, AWS} (NMI); Morristownbiller, {♀ 22 June 1953, AWS} (NMI); Royal Canal {11 July 1943, AWS} (NMI); {west of} Sallins, {♀ 4 August 1939, AWS} (NMI) (Fitton and Boston, 1988: p. 167); LAOIS: Portarlington, ♂ 26 July 1936, AWS (NMI) (det. MRB) (unpublished).

Ireland (Beirne, 1941a: p. 696 as *Diplazon*. ♂ ♀).

***Phthorima picta* (Habermehl, 1925)**

TYRONE: Moy, ♂4♀♀ 23 July 1983, MRB (Fitton and Boston, 1988: p. 168).

***Phthorima xanthaspis* (Thomson, 1890)**

DONEGAL: Coolmore, September 1916, among sallows *Salix*, WFJ (Johnson, 1917a:

p. 39 as *Phthorima*).

***Promethes bridgmani* Fitton, 1976**

synonym *Promethes scutellaris* (Bridgman, 1886) preoccupied

[ARMAGH: Poyntzpass, 31 July, emerged...from pupa on a blackberry (bramble) *Rubus* leaf, which Mr Moley tells me is that of a syrphid, WFJ (Johnson, 1914a: p. 66 as *Promethus scutellaris*) (reidentified as *Homocidus pictus* by AWS]; LAOIS: Emo Court, ♀ 3 October 1982, swept in mixed woodland, JMOC (NMI) (det. MRB); OFFALY: Charleville, ♀ 26 June 1988, PJC (UM) (det. MRB and RN); WEXFORD: Killoughrim, ♂ 16 June 1982, swept in oak *Quercus* woodland, JMOC (NMI) (det. MRB) (all unpublished).

Ireland (Beirne, 1941a: p. 705 as *Promethes scutellaris*. 7♂♂ 10♀♀).

***Promethes sulcator* (Gravenhorst, 1829)**

ANTRIM: Belfast, ♀ 13 June 1909, HLO (Johnson, 1912a: p. 79 as *Promethus*); Glarryford Bog, ♂ 24 May 1975, RN (UM); Rea's Wood, ♂ 25 September 1984, MRB and RN (UM) (both unpublished); ARMAGH: Poyntzpass, hill, August and {16} September {1920}, in field, WFJ (NMI) (Johnson, 1917a: p. 39 as *Promethus*; Johnson, 1921a: p. 106 as *Promethus*); Oxford Island, ♂ 6 June 1973, AGI (UM); CARLOW: Cloughristick, ♂ 19 June 1982, JMOC (NMI) (det. MRB) (both unpublished); DONEGAL: Coolmore, {15 September 1914}, on roadside among herbage, WFJ (Johnson, 1915: p. 132 as *Promethus*); Portnoo, {19} June {1918}, roadside, WFJ (NMI) (Johnson, 1919a: p. 36); DOWN: Cultra, ♂ 7 June 1985, MRB and RN (UM); Mourne Wood, ♀ 23 June 1975, RN (UM); Murlough NNR, ♂ 9 June 1973, MRB (UM) (det. MRB and RN) (all unpublished); Rostrevor, ♀ 5 July {1927}, WFJ (NMI); Warrenpoint, ♂♂♀♀ 17 {viii.1928} (NMI) and 30 August, 12 September {1928} (NMI), WFJ (both Johnson, 1929: p. 137 as *Promethus*); MAYO: Louisburgh, ♀ July, JNH (Morley, 1911a: p. 13 as *Promethus*); TYRONE: Moy, ♂♀ 14 August 1983 (♀), 25 September 1983 (♂), MRB (UM) (det. MRB) (unpublished).

Ireland (Morley, 1911b: p. 118 (footnote) as *Promethus*. Common in Ireland (Haliday MS. in Dublin Museum); Beirne, 1941a: p. 705. 12♂♂ 17♀♀; Townes *et al*., 1965: p.

413).

***Sussaba cognata* (Holmgren, 1858)**

synonym *Sussaba albicoxa* (Thomson, 1890)

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Promethus albicoxis*); same locality, ♂ August 1923, WFJ (Johnson, 1927: p. 160 as *Promethus*); Rea's Wood, ♂30 May 1975, MRB and RN (UM) (det. MRB and RN) (unpublished); ARMAGH: Poyntzpass, {24} August {1920}, field at angelica *Angelica*, at hogweed *Heracleum* and stable window, WFJ (NMI) (Johnson, 1916a: p. 20 as *Promethus albicoxis*; Johnson, 1921a: p. 106 as *Promethus albicoxis*; Johnson, 1922b: p. 69 as *Promethus albicoxis*); [same locality, August, field sweeping, WFJ (Johnson, 1921a: p. 106 as *Promethus cognatus* Hlgr. According to AWS, this is a misidentification]; CAVAN: Virginia, ♂♀♀ 30 May 1982, swept in mixed wood, JMOC (NMI) (det. MRB) (unpublished); DONEGAL: Coolmore, {7 September 1915}, on outside of bungalow and on roadside among herbage, WFJ (NMI) (Johnson, 1915: p. 132 as *Promethus*. The latter specimen has the abdomen dark); DOWN: Dundrum, ♀ August 1925, WFJ (Johnson, 1927: p. 160 as *Promethus*); Newcastle, ♂ 23 September, WFJ (Johnson, 1927: p. 137 as *Promethus*); Rostrevor, ♂ September 1924, WFJ (Johnson, 1927: p. 160 as *Promethus*); Tollymore, 2♂♂ 21 August 1984, MRB (UM); Mourne Wood, ♀ 23 June 1972, RN (UM); Cultra, ♀15 June 1988, MRB and RN (UM); KERRY: Kenmare Estate, Killarney, ♂♂ 8 September 1981, JPOC (NMI) (det. MRB); Muckross, Killarney, ♀ 10 September 1981, swept in the gardens, JPOC (NMI); KILDARE: Grand Canal, ♂ 23 May 1982, JMOC (NMI) (det. MRB) (all unpublished); MAYO: Achill, June 1909, JNH (NMI) (Morley, 1911a: p. 13 as *Promethus albicoxa*); TYRONE: Moy, ♂♂♀♀ 14 August 1983, 19-25 August 1985 (♂♂), 27 May-2 June 1985, 12-18 August 1985, 26 August-1 September 1985 (♀♀) all Malaise trap, MRB and RN (UM); WESTMEATH: Glenlough, 28 June 1987, PJC (UM); WEXFORD: Killoughrim, ♂ 16 June 1982, swept in oak *Quercus* woodland, JMOC (NMI) (det. MRB); WICKLOW: Kilmacanogue, ♂ 15 August 1982, swept in alder *Alnus* marsh on a stream, JMOC (NMI) (all unpublished) .

Ireland (Beirne, 1941a: p. 707 as *Promethes*. 34♂♂24♀♀; Townes *et al*., 1965: p. 414).

***Sussaba dorsalis* (Holmgren, 1856)**

ARMAGH: Poyntzpass, May 1916, in field, uncommon, WFJ (Johnson, 1917a: p. 39 as *Promethus*); DOWN: Murlough NNR, ♀ July 1977, Malaise trap, RN (UM) (det. MRB and RN); KERRY: Kenmare Estate, Killarney, ♂ 8 September 1981, JPOC (NMI) (det. MRB) (both unpublished); MAYO: Louisburgh, ♂ 17 July 1910, CM (NMI) (Morley, 1911a: p. 13 as *Promethus*).

Ireland (Beirne, 1941a: p. 708 as *Promethes*. 2♂♂♀; Kerrich, 1949: p. 6 though Stelfox says he has seen no Irish specimens without them [abdominal markings]; Townes *et al*., 1965: p. 414).

***Sussaba flavipes* (Lucas, 1849)**

synonym *Sussaba coriacea* misidentification

ANTRIM: Rea's Wood, ♀ 30 May 1975, Malaise trap, MRB and RN (UM); ARMAGH: Derryhubbert, ♂ October 1984, bog, RN (UM); CLARE: Caher River, ♂ 26 May 1975, AGI (UM); DONEGAL: Crolly Wood, ♂ 29 May 1976, RN (UM); DOWN: Cultra, ♂ 7 June 1985, swept, RN (UM); Mourne Wood, ♂ 23 June 1972, RN (UM); Murlough NNR, ♂ 29 October 1984, Malaise trap, BHN (UM); Tollymore, ♂ 21 August 1984, MRB (UM); TYRONE: Moy, ♀♀ 1-7 October 1984, Malaise trap, MRB and RN (UM) (all det. MRB and RN) (all unpublished).

Ireland (Broad (2005)).

***Sussaba pulchella* (Holmgren, 1856)**

synonym *Sussaba elongata* (Provancher, 1874)

synonym *Sussaba monticola* (Vollenhoven, 1880)

synonym *Sussaba laticarpus* (Thomson, 1890)

ARMAGH: Poyntzpass, August 1916, in field, WFJ (Johnson, 1917a: p. 39 as *Promethus*); same locality, field, ♂ August, WFJ (Johnson, 1921a: p. 106 as *Promethus laticarpus*. Variety with scutellum black); CAVAN: Virginia, ♂ 30 May 1982, JMOC (NMI) (det. MRB); CLARE: near Rathdorney River, Burren, ♂ 16 July

1981, JMOC (NMI); near Spa, Lisdoonvarna, ♂ 8 July 1981, JPOC (NMI) (det. MRB) (all unpublished); DOWN: Dromore, ♀ August 1925, WFJ (Johnson, 1927: p. 160 as *Promethus*); Murlough NNR, ♀ 9-15 October 1984, Malaise trap, BHN (UM) (det. MRB and RN) (unpublished); Newcastle, ♂ 11 June, WFJ (Johnson, 1929: p. 137 as *Promethus*); KERRY: Kenmare Estate, Killarney, ♂ 8 September 1981, JPOC (NMI) (det. MRB); Tomies Wood, Killarney, ♂ 15 September 1981, JPOC (NMI) (det. MRB) (both unpublished); MAYO: Achill, ♂ 7 June 1909, JNH (Morley, 1911a: p. 13 as *Promethus laticarpus*).

Ireland (Beirne, 1941a: p. 708 as *Promethes*. 17♂♂3♀♀; Beirne, 1941a: p. 708 as *Promethes monticola*. ♂♀; Townes *et al*., 1965: p. 414 as *Sussaba elongata*).

***Syrphoctonus collinus* (Stelfox, 1941)**

DUBLIN: Slade Brook, Glenasmole, ♀ 1 October 1930, 1000ft altitude, beaten from ?alder *Alnus* or willow *Salix*, AWS (Stelfox, 1941: p. 111 as *Homocidus*).

Ireland (Beirne, 1941a: p. 689 as *Diplazon*. Apparently rare, but frequent where it occurs).

***Syrphoctonus crassicornis* (Thomson, 1890)**

DUBLIN: no locality, AWS; WICKLOW: Glen of Imaal, at about 1200ft by the Little Slaney River, not uncommon, AWS (NMI); no locality {Clara, ♀ 27 July 1927}, AWS (NMI) (det AR) (Stelfox, 1941: p. 117 as *Homocidus*. It flies towards the end of June and into July, and has appeared to me to be in some way associated with willow bushes (*Salix aurita* and *S. cinerea*).

***Syrphoctonus dimidiatus* (Schrank, 1802)**

ARMAGH: Poyntzpass, field, May and August, at hogweed *Heracleum*, WFJ (Johnson, 1913: p. 140 as *Homocidus*; Johnson, 1921a: p. 106 as *Homocidus*); Poyntzpass lane, July, WFJ (Johnson, 1920a: p. 9 as *Homocidus*); DONEGAL: Coolmore, September 1916, on sandhills, WFJ (Johnson, 1917a: p. 39 as *Homocidus*); Portnoo, June, roadside, WFJ (Johnson, 1919a: p. 36 as *Homocidus*); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Homocidus*).

Ireland (Morley, 1911b: p. 103 as *Homocidus*. Found commonly in Ireland (Haliday

MS in Dublin Museum)).

***Syrphoctonus elegans* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass field, October, on wing at sycamore *Acer pseudoplatanus*, WFJ (Johnson, 1920a: p. 9 as *Homocidus elegans* var. *nigritarsus* Gravenhorst); same locality, August, at angelica *Angelica*, WFJ (Johnson, 1922b: p. 69 as *Homocidus elegans* var. *rufonotatus* Holmgren); DOWN: Rostrevor, ♂ 25 July 1929, grass plot, WFJ (Johnson, 1930: p. 157 as *Homocidus*. Var. (*fide* Dr A. Roman); LOUTH: Bellurgan, ♂ June 1916, among herbage on seashore, WFJ (Johnson, 1917a: p. 39 as *Homocidus elegans* var. *nigritarsus*).

***Syrphoctonus fissorius* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass hill, {21} June {1913}, WFJ (NMI) (Johnson, 1914a: p. 66 as *Homocidus*. Haliday's ms mentions it as common in Ireland); DOWN: Rostrevor, ♀ 5 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Homocidus*).

Ireland (Morley, 1911b: p. 99 as *Homocidus*. Haliday claims, in MS. in Dublin Museum, to have found it commonly in Ireland; Beirne, 1941a: p. 687 as *Diplazon*. ♂♀).

***Syrphoctonus gracilentus* (Holmgren, 1858)**

WICKLOW: Lough Ouler, on the shore, at 1800ft, {22 August 1937}, AWS (NMI); North Prison on Lugnaquilla, 2200ft {2000}, {20 August 1939}, AWS (NMI) (Stelfox, 1941: p. 118 as *Homocidus*).

Ireland (Beirne, 1941a: p 699 as *Diplazon*. 2♂♂).

***Syrphoctonus haemorrhoidalis* (Szépligeti, 1898)**

synonym *Homotropus tricolor* (Stelfox, 1941)

ANTRIM: Ballygally Head, north-west side, ♀ 25 July 1931, from a field, AWS (Stelfox, 1941: p. 115 as *Homocidus tricolor*); DUBLIN: Harold's Cross, holotype ♀ 14 June 1937, taken on a currant *Ribes* bush in garden, AWS (USNM) (Stelfox, 1941: p. 115 as *Homocidus tricolor*; Fitton, 1976: p. 349 as *Homocidus tricolor*); Slade Brook, at about 1000 ft. altitude, ♂ 15 June 1927, AWS; WICKLOW: Rathdrum, ♀ 8 July 1926, AWS (both Stelfox, 1941: p. 115 as *Homocidus tricolor*).

Ireland (Beirne, 1941a: p. 692 as *Diplazon tricolor*. ♂♀).

***Syrphoctonus impolitus* (Stelfox, 1941)**

LEITRIM: Bundrowse, along left bank of the River Drowse, just inland of the Bundoran-Sligo road, ♂ 1 August 1933, AWS (NMI); WICKLOW: The Quill, near Kilmacanogue, ♂ 28 May 1949, an old oak *Quercus* wood, BPB (NMI) (Stelfox, 1941: p. 117 as *Homocidus*).

Ireland (Beirne, 1941a: p. 699 as *Diplazon*. 2♂♂).

***Syrphoctonus longiventris* (Thomson, 1890)**

DOWN: Rostrevor, ♀ 10 July 1930, garden, WFJ (Johnson, 1931a: p. 54 as *Homocidus*). There are Irish Stelfox specimens in NMI.

Ireland (Beirne, 1941a: p. 695 as *Diplazon*. ♂♀).

***Syrphoctonus megaspis* (Thomson, 1890)**

Ireland (Beirne, 1941a: p. 693 as *Diplazon*. ♂♀).

***Syrphoctonus neopulcher* Horstmann, 1968**

synonym *Homotropus pulcher* misidentification

CARLOW: Cloughristick, ♀ 19 June 1982, JMOC (NMI) (det. MB as *Syrphoctonus*) (unpublished); DONEGAL: Portnoo, cliff, {25} June {1920}, WFJ (NMI) (Johnson, 1921a: p. 106 as *Homocidus pulcher*); DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Homocidus pulcher* Holmgren); Rostrevor, ♂ 25 July 1929, grass plot, WFJ (Johnson, 1930: p. 157 as *Homocidus tarsatorius*). Corrected by AWS in an annotation to *pulcher*); Warrenpoint, ♂ 10 August {1928}, WFJ (NMI) (Johnson, 1929: p. 137 as *Homocidus tarsatorius* Panz. (correction made by AWS in an annotation). Areolet present in right wing, absent in left).

Ireland (Beirne, 1941a: p. 702 as *Diplazon pulcher*. ♂♀).

***Syrphoctonus nigritarsus* (Gravenhorst, 1829)**

CAVAN: Virginia, ♀ 30 May 1982, JMOC (NMI) (det. MRB) (unpublished); DOWN: Rostrevor, ♂ 2 July, WFJ; Warrenpoint, ♀ 20 August, WFJ (NMI) (Johnson, 1929: p. 137 as *Homocidus*); DUBLIN: St John's Wood, Clondalkin, ♀♀ 3-17 July 1982, Malaise trap, JMOC (NMI) (det. MRB); KERRY: Torc Stream, Killarney, ♀ 10

September 1981, JPOC (NMI) (det. MRB) (both unpublished).

Ireland (Beirne, 1941a: p. 701 as *Diplazon*. ♂2♀♀; Townes *et al*., 1965: p. 404).

***Syrphoctonus pallipes* (Gravenhorst, 1829)**

DONEGAL: Coolmore, ♂ 14 September 1916, WFJ (NMI) (det. AWS as *Homotropus*).

Ireland (Beirne, 1941a: p. 703 as *Diplazon*. 2♀♀; Jussila, 1965: p. 119 as *Homotropus*; Jussila, 1976: p. 24 as *Homotropus*).

***Syrphoctonus pictus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, field and hill, June and July, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1914a: p. 66 as *Homocidus*; Johnson, 1921a: p. 106 as *Homocidus*. Holmgren's var. 1, with scutellum entirly black); same locality, 31 July, emerged...from pupa on a blackberry leaf, which Mr Moley tells me is that of a syrphid, WFJ (Johnson, 1914a: p. 66 as *Promethus scutellaris*) (re-identified as *Homocidus pictus* by AWS); DONEGAL: Coolmore, among sallows *Salix*, WFJ (Johnson, 1915: p. 132); DOWN: Dromore, ♂ August 1925, WFJ; Rostrevor, ♀ September 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Homocidus*); same locality, ♀ 7 August 1929, field opposite, 4 September 1929, in house, WFJ (Johnson, 1930: p. 157 as *Homocidus*); Newcastle, ♀♀ 10 August and 22 September, WFJ (Johnson, 1929: p. 137 as *Homocidus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Homocidus*); MAYO: Sraheens Lough, Achill, ♀ June, WFJ (Morley, 1911a: p. 8 as *Stenichneumon*).

Ireland (Beirne, 1941a: p. 693 as *Diplazon*. 9♂♂4♀♀; Kerrich, 1949: p. 5 as *Diplazon*. A. W. Stelfox writes that the coxae are often black in *pictus* Grav. auctt., and this is true for Irish specimens in the British Museum series; Jussila, 1965: p.118).

***Syrphoctonus signatus* (Gravenhorst, 1829)**

synonym *Homotropus hygrobius* (Thomson, 1890)

[ARMAGH: Poyntzpass, September, field, WFJ (NMI) (misidentified according to Stelfox) (Johnson, 1922b: p.69 as *Homocidus*)]; [DONEGAL: Coolmore, on sandhills at thistles *Carduus*, WFJ (NMI) (misidentified according to Stelfox) (Johnson, 1915:

p. 132)]; Portnoo shore, June, WFJ (NMI) (Johnson, 1920a: p. 9 as *Homocidus*); [DOWN: Greencastle, ♂♂ 21, [22 and 23 August 1930, roadside, WFJ (misidentified according to Stelfox) (NMI) (Johnson, 1931c: p. 140 as *Homocidus hygrobius*. One specimen is Thomson's var. a `*alis areola parva sessili*')]; [Newry, July 1916, caught on the wing when driving to, WFJ (NMI) (misidentified according to Stelfox) (Johnson, 1917a: p. 39 as *Homocidus hygrobius*)]; Warrenpoint, ♂ 10 August, WFJ (Johnson, 1929: p. 137 as *Homocidus*); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (NMI) (det. AWS) (Speight and Healy, 1977: p. 153 as *Diplazon*); KERRY: Rossbeigh, Bouskell (Morley, 1905: p. 435 as *Homoporus*; Morley, 1911b: p. 113 as *Homocidus*); MAYO: Clare Island, ♀ June 1911, WFJ (NMI) (Morley, 1911a: p. 13 as *Homocidus*); WICKLOW: Kilmacanogue, ♀ 15 August 1982, JMOC (NMI) (det. MRB) (unpublished).

Ireland (Beirne, 1941a: p. 701 as *Diplazon*. 13♂♂; Townes *et al*., 1965: p. 404).

***Syrphoctonus simulans* (Stelfox, 1941)**

DUBLIN: Glenasmole, by the head of the upper reservoir, holotype ♀ 31 August 1937, AWS (USNM) (Stelfox, 1941: p. 112 as *Homocidus*; Fitton, 1976: p. 349 as *Homocidus*); Verschoyle's Hill, ♀ 12 September 1954, AWS (NMI) (unpublished); Upper Glenasmole, by the Slade Brook, at about 1000ft, ♀ 16 June 1929, at willow *Salix*, AWS (Stelfox, 1941: p. 112 as *Homocidus*); WICKLOW: Imaal, Leitrim, ♀ 28 July 1940, AWS (NMI) (unpublished).

Ireland (Beirne, 1941a: p. 691 as *Diplazon*. ♀).

***Syrphoctonus strigator* (Fabricius, 1793)**

Ireland (Morley, 1911b: p. 108 as *Homocidus*. Haliday mentions it, in his MS diary now in the Dublin Museum, as being common in Ireland).

***Syrphoctonus subopacus* (Stelfox, 1941)**

DOWN: no locality; DUBLIN: Glenasmole, ♂(paratype) (NMI), holotype ♀ (USNM) 22 May 1938, swept under trees near caretaker's house, AWS (Stelfox, 1941: p. 116 as *Homocidus*; Fitton, 1976: p. 349 as *Homocidus*); WESTMEATH: no locality; WICKLOW: no locality (Stelfox, 1941: p.116 as *Homocidus*. Described from many

♂♂ and ♀♀...Co-types from Counties Down, Wicklow, Westmeath and Dublin).

Ireland (Beirne, 1941a: p. 692 as *Diplazon*. ♂2♀♀).

***Syrphoctonus tarsatorius* (Panzer, 1809)**

ARMAGH: Poyntzpass hill and lane, June, July and October, WFJ (NMI) (Johnson, 1914a: p.66 as *Homocidus*; Johnson, 1920a: p. 9 as *Homocidus*; Johnson, 1921a: p. 106 as *Homocidus*. Female (var.=*Bassus insignis* Gravenhorst, Holmgren, exactly `apiceque scutelli et postscutelli pallide flavis); DONEGAL: Portnoo, September, WFJ (Johnson, 1919a: p. 36 as *Homocidus*); DOWN: Greencastle, ♂ 15 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as *Homocidus*); Rostrevor, ♀♀ May, June and September 1923, June 1925, WFJ (NMI) (Johnson, 1927: p. 160 as *Homocidus*); [same locality, ♂ 25 July 1929, grass plot, WFJ (Johnson, 1930: p. 157 as *Homocidus*). Corrected by AWS in annotation to *pulcher*]; LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Homocidus*); MAYO: Belclare, July, one of the var. *pulchellus* Desvignes, JNH (Morley, 1911a: p. 13 as *Homocidus*).

Ireland (Beirne, 1941a: p. 689 as *Diplazon*. 2♂♂♀; Townes *et al*., 1965: p. 405).

***Syrphophilus bizonarius* (Gravenhorst, 1829)**

Ireland (Townes *et al*., 1965: p. 408).

***Syrphophilus tricinctorius* (Thunberg, 1822)**

synonym *Syrphophilus cinctus* (Gravenhorst, 1829)

synonym *Syrphophilus lateralis* (Gravenhorst, 1829)

ANTRIM: Cave Hill, ♀, HLO (NMI) (Johnson, 1912a: p. 79 as *Homocidus cinctus*); Glenarm, ♀ 20 May 1976, RN (UM); Rea's Wood, ♀ 30 May 1973 deciduous woodland, RN (UM) (both unpublished); ARMAGH: Poyntzpass hill, June, WFJ (NMI) (Johnson, 1914a: p. 66 as *Homocidus cinctus* Grav. var. *lateralis* Thoms. The variety has the three or four basal segments of the abdomen with the lateral angles alone pale. I also took a variety with the abdomen entirely black); same locality, August, in house, WFJ (NMI); DOWN: Newcastle, ♂ 8 October {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Homocidus cinctus*); Rostrevor, ♂ September 1924, WFJ (Johnson, 1927: p. 160 as *Homocidus cinctus* var. *scabriculus* Holmgren); same

locality, ♀ 8 August 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 157 as *Homocidus cinctus*); Stormont, ♀ 15 August 1973, garage, AGI (UM); FERMANAGH: Glenasheevar, ♀ 5 June 1973, RN (UM) (both unpublished); LOUTH: Omeath, June, WFJ (NMI) (Johnson, 1915: p. 132 both records as *Homocidus cinctus* var. *lateralis*); MAYO: Brackloon Wood, ♀ 4 August, PEG (Morley, 1911a: p. 13 as *Homocidus lateralis*); SLIGO: Beltra Loughs, ♂, PJC (UM); TYRONE: Moy, ♂♂♀♀ 24-30 September 1984, 7 October 1984 and 2 June 1985, hawthorn *Crataegus*/herbaceous verge, MRB and RN (UM) (all unpublished).

Ireland (Townes *et al*., 1965: pp 408-409).

***Tymmophorus obscuripes* (Holmgren, 1858)**

ANTRIM: Belfast, June, HLO (Johnson, 1913: p. 140 as *Homocidus*); Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Homocidus*); Rea's Wood, ♀ 22 May 1985, MRB and RN (UM) (unpublished); ARMAGH: Poyntzpass, May, sweeping, WFJ (Johnson, 1922b: p. 69 as *Homocidus*); CAVAN: Virginia, ♀ 30 May 1982, JMOC (NMI) (det. MRB) (unpublished); DOWN: Dromore, August 1925 (NMI) (Johnson, 1927: p. 160 as *Homocidus*. ♂, var. clypeo nigro, macula media faciei deficiente); DUBLIN: Clondalkin, ♀ 1-9 September 1982, Malaise trap in suburban garden, JPOC (NMI) (det. MRB); FERMANAGH: Marble Arch, ♂ 27 May 1984, RN and MRB (UM); GALWAY: Rosleague House, Letterfrack, ♀ 24 July 1982, JMOC (NMI) (det. MRB); TYRONE: Moy, 2♂♂♀♀ 29 May-2 June 1985, Malaise trap (♀), 4 August 1984, 25 September 1983 (♂♂), MRB and RN (UM) (all det. MRB and RN) (all unpublished).

***Tymmophorus rufiventris* (Gravenhorst, 1829)**

synonym *Zootrephes suspiciosus* (Brischke, 1871)

ANTRIM: Rea's Wood, 30 May 1973, RN (UM) (det. MRB and RN) (unpublished); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (NMI) (det. AWS) (Speight and Healy, 1977: p. 153 as *Zootrephus*); St John's Wood, Clondalkin, ♀♀ 3-17 July 1982, JMOC (NMI) (det. MRB) (unpublished); MAYO: Clare Island, two June 1909, JNH (NMI); Louisburgh, both sexes somewhat common July, CM (NMI) (Morley,

1911a: p. 13 as *Zootrephus*); WESTMEATH: Glen Lough, ♂3♀♀, 28 June 1987; Lough Slevin, ♀ 28 July 1987, PJC (UM) (det. MRB and RN) (both unpublished).

Ireland (Morley, 1911b: p. 115 as *Zootrephus*. As common in Ireland by Haliday (MS. in Dublin Museum); Beirne, 1941a: p. 665 as *Zootrephus suspiciosus*. 6♂♂7♀♀. It is apparently commoner in Ireland than in England, probably owing to the greater prevalence of damp rushy fields).

***Woldstedtius biguttatus* (Gravehorst, 1829)**

DOWN: Warrenpoint, ♀ 27 August, WFJ (Johnson, 1929: p. 137 as *Homocidus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Homocidus*).

Ireland (Morley, 1911b: p. 95 as *Homocidus*. Haliday tells us, in his MS. diary in the Dublin Museum, that he found this species commonly in Ireland; Beirne, 1941a: p. 685 as *Diplazon*. 2♂♂3♀♀).

***Woldstedtius citropectoralis* (Schmiedeknecht, 1926)**

synonym *Syrphoctonus abdominator* (Bridgman, 1886) preoccupied

DOWN: Drinnahilly, ♂♂ 16 June 1963, AWS (NMI) (det.AWS as *Diplazon* (unpublished)).

Ireland (Beirne, 1941a: p. 686 as *Diplazon abdominator*. 4♀♀; Beirne, 1941a: p. 687 as *Diplazon*. ♂).

***Woldstedtius flavolineatus* (Gravenhorst, 1829)**

ANTRIM: Belfast, Lady Dixon Park, ♀ September 1985 (emerged 14 April 1986), collected as a syrphid (Diptera: Syrphidae) larva, RA (UM) (det. MRB and RN) (unpublished); ARMAGH: Poyntzpass field, September, WFJ (Johnson, 1920a: p. 9 as *Homocidus*).

Ireland (Beirne, 1941a: p.686 as *Diplazon*. 4♂♂4♀♀; Townes, 1965: pp 406-407 as *Syrphoctonus*).

EUCEROTINAE

The subfamily comprises a single genus, *Euceros*, world-wide in distribution, with about 45 species. Three species occur in the British Isles. Male *Euceros* can be

recognized easily by the flattened and widened antennal segments. This character is less well developed in females.

Species of *Euceros* are hyperparasites and they have an extraordinary and complex life-history, quite unlike that of any other ichneumonids. Female *E. frigidus* lay stalked eggs in groups on the pine foliage, near to the sawfly larvae. The egg stalk is chorionic like that of Tryphoninae and is attached by a cup-like, presumably sticky, structure to the plant. Compared to other ichneumonids the ovipositor of *Euceros* is very feeble. The first larval instar is a 'planidium' which uses the egg stalk as a platform from which it can transfer to a passing sawfly larva. This primary host larva serves as a carrier and source of nutrition, but no further development takes place unless it is parasitized by another ichneumonid. The two adaptations needed to ensure the success of this hazardous strategy are the production of an adequate number of eggs and the timing and location of oviposition. In *E. frigidus* the female has the exceptionally large number of about 100 ovarioles and this corresponds well to the number of eggs laid in a single cluster. Estimates of total fecundity range from 900 to 5000. The egg clusters extended over about 15 cm of foliage starting about 11 cm from the colonies of young sawfly larvae. The sawfly larvae proceed towards the *Euceros* eggs as they feed and their passage through the cluster occurs just after the eggs have hatched.

The planidium comes to rest in an integumental fold on the carrier host and attaches itself using its mouthparts. Before attachment has taken place planidia can transfer from one sawfly larva to another. Just prior to each host ecdysis the planidium passes through the old integument and re-attaches itself, maintaining the same position on the host. Within the cocoon spun by the mature sawfly larva the planidium transfers to its true host, the larva of a primary ichneumonid parasite of the sawfly. The primary parasite larva survives to become fully-grown and to spin its own cocoon, within which the *Euceros* spins its flimsy cocoon and pupates. Of course, the carrier host is not always parasitized by a primary parasite and in such cases the planidium transfers to the pupa and eventually to the adult but fails to develop further.

The primary hosts with which *Euceros* species are associated include Lepidoptera as well as sawflies. The primary ichneumonid parasites which act as hosts include ectophagous and endophagous species, of the subfamilies Anomaloninae, Banchinae, Campopleginae, Ctenopelmatinae, Ophioninae, Cryptinae and Tryphoninae (Phytodietini). There are also a few records from braconid primary parasites. All *Euceros* species seem to be associated with primary hosts on trees and shrubs (angiosperms and gymnosperms) and the available data suggest that the north temperate species, at least, are all univoltine.

***Euceros albitarsus* Curtis, 1837** **New to Ireland**

WICKLOW: Powerscourt Deerpark (Dpk), 27 May 1932, AWS (NMI).

***Euceros serricornis* (Haliday, 1839)**

DOWN: Tollymore, ♀ 21 August 1984, along a mixed deciduous forest ride, MRB (UM) (Boston, 1986a: p. 116); WICKLOW: no locality, ♂♀ (lectotype ♀ paralectotype ♀ (NMI)) June, AHH (Haliday, 1839: p. 117 as *Bassus*; Halbert, 1908: p. 152 as *Acrodactyla*; Morley, 1911b: p. 282; Fitton, 1976: p. 332 as *Bassus*; Boston, 1986: p. 116).

Ireland (Townes *et al.*, 1965: p. 118; Fitton, 1984a: p. 190).

ICHNEUMONINAE

The large subfamily Ichneumoninae includes a relatively large proportion of large, colourful species and it has always attracted more attention from taxonomists and amateur entomologists than other subfamilies. On a world scale this means that it is better known than any other large subfamily, with almost 4,300 described species. The Ichneumoninae comprises about 15% of the British Isles ichneumonid fauna.

Ichneumonines are solitary internal idiobiont or koinobiont parasites of Lepidoptera, with oviposition almost always into the pupa or final larval instar, respectively, and adult emergence always from the host pupa. Females of many groups search for hosts on foot, low down in the undergrowth or in the litter layer. Some have fossorial fore limbs and may tunnel into loose soil; those which oviposit only into fresh pupae apparently locate them by following the ephemeral scent trail

left by the host larva as it burrowed into the ground. A few species are known to oviposit into immature larvae, for example, the females of *Limerodops elongatus* (Brischke) use their specialized elongate metasoma to reach the early larval instars of *Hadena gemina* Hübner hidden in their protective webs in the inflorescences of certain grasses. Most European species are univoltine. Fertilized females of some groups hibernate in tree stumps, and similar situations during the winter. Other species overwinter as a first instar larva in the fatty tissue of the host pupa, and these species are often bivoltine and may parasitize different host species in the spring and autumnal generations. The egg may be deposited free in the host haemocoel or may be placed more precisely, for example, in *Poecilostictus cothurnatus* (Gravenhorst) in wall of the hind gut. Females of some species feed on host pupae.

Eurylabini

***Eurylabus torvus* Wesmael, 1845**

DOWN: Rostrevor, ♂ 13 June 1930, among herbage on roadside, WFJ (NMI) (Johnson, 1931a: p. 53 *teste* Dr Roman).

***Eurylabus tristis* (Gravenhorst, 1829)**

ANTRIM: Belfast, HLO (NMI) (Johnson, 1913: p. 139).

Goedartiini

***Goedartia alboguttata* (Gravenhorst, 1829)** **New to Ireland**

?DUBLIN: Dublin district, ♀ bred by Rev. K. M. Dunlop, (NMI) (det. JFP); KERRY: Cloghereen, Muckross, Killarney, ♀ 1 September 1937, JNH (NMI) (det. AWS).

Heresiarchini

***Amblyjoppa fuscipennis* (Wesmael, 1845)**

LOUTH: Termonfeckin, ♂♀ July 1924, several on the sandhills at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1927: p. 158 as *Protichneumon*; Boston, 1985a: p. 507); WEXFORD: Forth Hill, ♂ July 1900, JNH (NMI) (Morley, 1911c: p. 20 as *Protichneumon*; Anon., 1913: p. 43 as *Protichneumon*; Boston, 1985a: p. 507).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Amblyjoppa proteus* (Christ, 1791)**

DONEGAL: Ards Forest Park, ♂ 11 August 1978, M. de Courcy Williams (NMI) (det JPOC) (unpublished); Lough Trumman, ♂ July 1977, on alder *Alnus*, RA (UM); DOWN: River Quoile near Downpatrick, ♀ August 1984, emerged from pupa of elephant hawk-moth *Deilephila elpenor* (L.) (Lepidoptera: Sphingidae) collected as pre-pupa in August 1984, B. Bleakly (UM) (Boston, 1985a: p. 507).

Ireland (Boston and Nash, 1989: p. 136 UM; Yu, 1998: CD-Rom).

***Callajoppa cirrogaster* (Schrank, 1781)**

synonym *Trogus lutorius* (Fabricius, 1787)

KERRY: Caragh (Carah) Lake, ♀ 20 August 1901, JWY (Morley, 1902: p. 54 as *Trogus lutorius*; Morley, 1903: p. 14 as *Trogus lutorius*).

***Coelichneumon bilineatus* (Gmelin, 1790)**

ARMAGH: Poyntzpass, {22} May {1919}, WFJ (NMI) (Johnson, 1920a: p. 8); [same locality, February, under bark of Scots pine *Pinus sylvestris*, WFJ (Johnson, 1920: p. 65 as *Barichneumon bilineatus* Gravenhorst. This record probably refers to *Barichneumon bilunulatus*)].

***Coelichneumon castaniventris* (Gravenhorst, 1829)** **New to Ireland**

DONEGAL: Coolmore, 25 September 1915, road, WFJ (NMI).

***Coelichneumon comitator* (Linnaeus, 1758)** **New to Ireland**

WICKLOW: Powerscourt, ♀ 7 June 1940, AWS (NMI) (det. JFP).

***Coelichneumon consimilis* (Wesmael, 1845)**

ANTRIM: Belfast, 12 June 1909, HLO (Johnson, 1912a: p. 77).

***Coelichneumon cyaniventris* (Wesmael, 1859)**

KERRY: Muckross Peninsula, Killarney, ♂ 11 September 1981, swept from pasture and scrub near mixed wood, JPOC (NMI) (det. JPOC) (O'Connor, 2004a: p. 26).

***Coelichneumon deliratorius* (Linnaeus, 1758)**

CORK: Glengariff, ♂ 13 June 1901, JWY (Morley, 1902: p. 54; Morley, 1903: p. 113 as *Ichneumon*); DOWN: Rostrevor, ♂ {18} June 1925, WFJ (NMI) (Johnson, 1927: p. 158 as *Ichneumon*); same locality, ♂ 14 August 1929, river, WFJ (NMI); same locality, ♀ 14 May 1929, in window of drawing room, Mrs Johnson (NMI) (both

Johnson, 1930: p. 156 as *Ichneumon*); Warrenpoint, ♂ 6 June {1928}, WFJ (NMI) (Johnson, 1929: p. 135 as *Ichneumon*); FERMANAGH: Tempo, CL (Johnson, 1919a: p. 35 as *Ichneumon*); MAYO: Brackloon Wood, 2♂♂ August, PEG (Morley, 1911a: p. 9 as *Ichneumon*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Coelichneumon leucocerus* (Gravenhorst, 1820)**

ARMAGH: Poyntzpass, August, WFJ (Johnson, 1913: p. 138).

***Coelichneumon nigerrimus* (Stephens, 1835)**

synonym *Coelichneumon derasus* (Wesmael, 1845)

DOWN: Killysavin, May, WFJ (Johnson, 1913: p. 138 as *Coelichneumon derasus*); Newcastle, ♂ 13 May {1927}, WFJ (NMI) (Johnson, 1929: p. 135 as *Coelichneumon derasus*); KERRY: Kenmare, ♂ 26 July 1908, HWA (Morley, 1908b: p. 276 as *Coelichneumon derasus*; Loo Bridge, ♀ 29 June 1901, JWY (Morley, 1902: p. 54 as *Coelichneumon derasus*; Morley, 1903: p. 30 as *Coelichneumon derasus*); KILDARE: Skerries Bog, ♂ 19 September 1946, AWS (NMI) (det. JFP); LAOIS: Emo Park, ♀ 16 July 1933, AWS (NMI) (det. JFP) (both unpublished).

[***Protichneumon fusorius* (Linnaeus, 1761)**

WEXFORD: Kilmore, ♂, Bignell Collection (Perkins, 1953: p. 120 misidentification of *Ichneumon primatorius*).

Ireland (Morley, 1903: p. 17. I have seen an example in Bignell's collection).]

***Protichneumon pisorius* (Linnaeus, 1758)** **New to Ireland**

LOUTH: Termofeckin, 27 August 1924, WFJ (NMI).

***Syspasis lineator* (Fabricius, 1781)**

synonym *Syspasis trilineata* (Gmelin, 1790)

ARMAGH: Richhill, ♀ 14 August 1909, HLO (NMI) (det. CM) (Johnson, 1912a as *Stenichneumon trilineatus*); LOUTH: Termonfeckin, ♀ (small) August 1924, WFJ (NMI) (Johnson, 1927: p. 158 as *Stenichneumon trilineatus*).

Ireland (Boston and Nash, 1989: p. 136 UM).

Ichneumonini

***Achaius oratorius* (Fabricius, 1793)**

ANTRIM: Glenarm, ♀ 11 April 1974, in moss woodlands, CR (UM) (det. MRB); Rea's Wood, ♀ 10 July 1985 deciduous woodland, RN and MRB (UM) (det. MRB); ARMAGH: Poyntzpass, ♂ {13} June {1914}, flying around hazel *Corylus* trees in garden, WFJ (NMI) (Johnson 1915: p. 130 as *Amblyteles*); DOWN: Newcastle, ♂ 17 September, WFJ (Johnson, 1929: p. 135 as *Amblyteles*. Var. *atramentarius*); Rostrevor, June 1924, WFJ (Johnson, 1927: p. 158 var *stramentarius* Gravenhorst); same locality, ♂ 14 July 1974, oak *Quercus* woodland, RN (UM)) (det. MRB).

Ireland (Boston and Nash, 1989: p. 136 as *Achaeus*. UM).

***Amblyteles armatorius* (Forster, 1771)**

ANTRIM: Belfast (Botanic Gardens), ♂ September 1984, RN (UM) (det. MRB); ARMAGH: Poyntzpass, hill, {16} September {1920}, WFJ (Johnson, 1921a: p. 105); same locality, July, field, WFJ (Johnson, 1922b: p. 69); The Argory, ♂ 8 July 1985, marshy field with thistles *Carduus*, MRB (UM) (det. MRB); CORK: Glengariff, ♂ 19 June 1901, JWY (Morley, 1902: p. 54); DONEGAL: Portnoo, September, bog road, WFJ (NMI) (Johnson, 1919a: p. 35); Dungloe, ♂ 19 July 1977, hedgerow, RN (UM); DOWN: Ballymacormick Point, ♂ 16 July 1985, on hogweed *Heracleum*, MRB (UM) (det. MRB); Bangor, 1969, garden, CR (UM); Belmont 27 August 1975, PD (UM); Greencastle, ♂ 6 August 1930, shore near pier at wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1931c: p. 140); Groomsport, ♀ 23 October, under a stone, upper shore sandy beach, RA (UM) (det. RN and MRB); Holywood, ♀ 29 October 1984, HCGC (UM) (det. MRB); Newcastle, ♂ 9-27 August, WFJ (Johnson, 1929: p. 135); Rostrevor, August 1922, WFJ (Johnson, 1923: p. 38); same locality, June, July and September 1923, WFJ (NMI); Warrenpoint, ♂ 3 July, WFJ (NMI) (Johnson, 1929: p. 135); same locality, ♂ 27 June 1929, in field, WFJ (Johnson, 1930: p. 156); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (both Johnson, 1927: p. 158 ♀); TYRONE: Moy, ♂ 29 July-4 August 1985, Malaise trap, MRB and RN (UM).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Aoplus altercator* (Wesmael, 1855)**

DOWN: Donard Park, ♀ 27 July 1985, on bramble *Rubus*, deciduous scrub-plantation, RA (UM) (det. MRB); WICKLOW: no locality, 2♂♂9♀♀ June - August, (BMNH) {Devil's Glen, ♀ 4 May 1937, AWS (NMI)} (Perkins, 1953: p. 139).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Aoplus castaneus* (Gravenhorst, 1820)**

DUBLIN: Slade Brook (Bk), ♂ 10 August 1951, AWS (NMI) (det. JFP) (unpublished); LOUTH: Termonfeckin, ♂ {22} July 1924, WFJ (NMI) (Johnson, 1927: p. 158 as *Stenichneumon*).

***Aoplus defraudator* (Wesmael, 1845)**

DOWN: Newcastle, ♂ 11 September 1955, AWS (NMI) (det. AWS); Tollymore Park, ♂ 19 June 1961, AWS (NMI) (det. AWS) (both unpublished); WICKLOW: no locality, 3♂♂11♀♀ June - September (BMNH) (Perkins, 1953: p. 139).

***Aoplus ochropis* (Gmelin, 1790)**

ANTRIM: Killead, August 1923, WFJ (NMI); DOWN: Rostrevor, September 1923, WFJ (both Johnson, 1927: p. 158 as *Stenichneumon*, ♂); ARMAGH: Poyntzpass, field, ♂ August, WFJ (Johnson, 1921a: p. 105 as *Stenichneumon*); DONEGAL: Coolmore, ♂♂ 9 and 15 September 1915, WFJ (NMI) (det. JFP) (unpublished); DOWN: Newcastle, ♂ 25 May, WFJ (Johnson, 1929: p. 135 var. *punctifrons* Holmgren; Perkins, 1953: p. 122 misidentified as *Cratichneumon dissimilis*) Newcastle, 18 and 31 May, 23 September, WFJ (NMI) (Johnson, 1929: p. 135 as *Stenichneumon*); Rostrevor, ♂ 29 May 1929, woods, WFJ (Johnson, 1930: p. 156 as *Stenichneumon*); TYRONE: Moy, ♂♂ 2-4 June 1985, Malaise trap, 20-25 May 1985, Malaise trap, 27 May-2 June 1985, Malaise trap, 7 June 1985, ♀ 29 May 1983, MRB (UM) (det. MRB and RN); WEXFORD: ?Courtown (Courten), AB (Morley, 1903: p. 48 as *Stenichneumon*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Aoplus ruficeps* (Gravenhorst, 1829)**

ANTRIM: Rea's Wood, 4♂♂ 22 May 1985, ♂ 16-18 May 1985, Malaise trap in deciduous woodland with marshy patches, MRB and RN (UM) (Boston and Nash,

1989: p. 135); DOWN: Newcastle, ♂♂ 17 and 13 May, WFJ (NMI) (Johnson, 1929: p. 135 as *Cratichneumon*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Baranisobas ridibundus* (Gravenhorst, 1829)**

DONEGAL: Coolmore, {10} September {1915}, among sallows *Salix*, by no means common, WFJ (NMI) (Johnson, 1916a: p. 18 as *Barichneumon*); same locality, ♂ {4} September 1916, among sallows *Salix*, WFJ (NMI) (Johnson, 1917a: p. 37 as *Barichneumon*. Variety with head, meso- and metathorax and hind femora except extreme base, black); DOWN: Rostrevor, in Victoria Square, ♂ 24 August 1929, among grass, WFJ (NMI) (Johnson, 1930: p. 156 as *Barichneumon*).

[*Barichneumon albicaudatus* (Fonscolombe, 1847)

synonym *Barichneumon angustatus* (Wesmael, 1848)

DOWN: Dundrum, ♂ July 1926, WFJ (Johnson, 1927: p. 158 as *Barichneumon angustatus*; Perkins, 1953: p. 125 misidentification of *Barichneumon chionomus*).]

***Barichneumon anator* (Fabricius, 1793)**

DONEGAL: Coolmore, ♂ September 1916, on the wing, WFJ (Johnson, 1917a: p. 37); DOWN: Newcastle, June, JJK (Johnson, 1918: p. 107).

***Barichneumon bilunulatus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, February, under bark of Scots pine *Pinus sylvestris*, WFJ (Johnson, 1920: p. 65 as *Barichneumon bilineatus* Gravenhorst. This probably refers to *bilunulatus*); DOWN: Rostrevor, ♀ 13 June 1930, among herbage on roadside, WFJ (NMI) (Johnson, 1931a: p. 53); LOUTH: Termonfeckin, ♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 158); MAYO: Clare Island, ♀ July 1910, CM (NMI) (Morley, 1911a: p. 9).

***Barichneumon chionomus* (Wesmael, 1845)**

DOWN: Dundrum, ♂ July 1926, WFJ (Johnson, 1927: p. 158 as *Barichneumon angustatus*; Perkins, 1953: p. 125 misidentified as *Barichneumon angustatus* (now *Barichneumon albicaudatus*)); Greencastle, ♀ 22 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 139); Rostrevor, {5 and 28} September 1923, WFJ (NMI)

(Johnson, 1927: p. 158).

***Barichneumon gemellus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, hill, specimen {10} June {1914}, WFJ (NMI) (Johnson, 1916a: p. 18); same locality, field, ♂ {24} May {1920}, WFJ (NMI) (Johnson, 1921a: p. 105 var. *opticus* Gravenhorst. The male variety with the scutellum entirely black; Johnson, 1931a: p. 53); DOWN: Rostrevor, ♂ 26 {25} May 1930, in a field among nettles *Urtica*, WFJ (NMI) (Johnson, 1931a: p. 53 *teste* Dr Roman); same locality, ♀ 6 September 1930, in a greenhouse, WFJ (NMI) (Johnson, 1931a: p. 53 as *Ichneumon albipictus* var. *obsoletus* Berthomieu. A form with scutellum and segments 1-5 of hind body black; Perkins, 1953: p. 123 misidentified as *Melanichneumon albipictus* var. *obsoletus*); KERRY: Kenmare (Morley, 1902: p. 54 as *Barichneumon monostagon*; Johnson, 1916a: p. 18 Morley's record should be altered to *B. gemellus*); MAYO: Old Head, ♂ 24 June 1942, AWS (NMI) (det. JFP) (unpublished).

***Barichneumon peregrinator* (Linnaeus, 1758)**

synonym *Barichneumon vacillatorius* (Gravenhorst, 1829) preoccupied

DONEGAL: Coolmore, ♂ August 1917, in a window, WFJ (Johnson, 1918: p. 107 as *Barichneumon vacillatorius*); DOWN: Newcastle, numerous ♀♀ 6 May, 24, 25 and 27 August, 3 and 6 September, roadside, hill and demense, mostly on Umbelliferae, WFJ (NMI) (Johnson, 1929: p. 135 as *Barichneumon vacillitorius*).

***Chasmias lugens* (Gravenhorst, 1829)**

ANTRIM: Carr's Glen, ♀ 24 February 1912, taken under loose bark on a birch *Betula* tree, HLO (NMI) (Johnson, 1912a: p. 77 as *Ichneumon*; Johnson, 1912b: p. 91 as *Ichneumon*; Johnson, 1920: p. 65 as *Ichneumon*; Halbert, 1915: p. 164 as *Ichneumon.* Found hibernating); DOWN: Holywood, ♀ {1909, HLO} (NMI) (Johnson, 1912a: p. 77 as *Ichneumon*); KERRY: Kenmare, ♀ August, JJK (Johnson, 1917a: p. 38 as *Ichneumon.* With black scutellum); TYRONE: Moy, 3 ♀♀ 24-30 September 1984, Malaise trap, 15-20 October 1984, Malaise trap, 8-14 October 1984, Malaise trap (MRB as *Ichneumon lugens*) (UM) (det. MRB), ♂♂ 27 May-2 June 1985, Malaise trap, MRB and RN (UM).

Ireland (Boston and Nash, 1989: p. 136 as *Ichneumon*. UM).

***Chasmias motatorius* (Fabricius, 1775)**

ANTRIM: Cave Hill, HLO (NMI) (Johnson, 1912a: p. 77); Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 158); Rea's Wood, ♂♀ 22 May 1985 (♂) and 25 September 1984 (♀), RN and MRB (UM) (det. MRB); ARMAGH: Poyntzpass, ♂♂ July, in fields, WFJ (Johnson, 1918: p. 107); Poyntzpass hill, August and ♂ (melanic form) October, WFJ (NMI) (Johnson, 1920a: p. 8); DONEGAL: Coolmore, ♂♂ September, among sallows *Salix*, WFJ (NMI) (Johnson, 1916a; p 17 remarkable for their pale coloration, p. 19); DOWN: Newcastle, ♀ 25 May, WFJ (Johnson, 1929: p. 135; Perkins, 1953: p. 128 misidentified as *Ichneumon gratus*); Warrenpoint, ♂ 27 August, WFJ (Johnson, 1929: p. 135 as *Chasmodes*. Scutellum black); GALWAY: Kilchrest, ♀ 12 July 1976, RN (UM) (det. MRB); MAYO: Achill Sound, ♀♀, WFJ (NMI); {Louisburgh} Carrowmore Lough, ♀♀ {18} July {1910}, swept from reeds, CM (NMI) (Morley, 1911a: p. 9).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Cratichneumon albifrons* (Stephens, 1835)** **New to Ireland**

DUBLIN: Slade Brook, Glenasmole, 1 October 1930, AWS (NMI); WICKLOW: Deputy's Pass, 24 July 1929, AWS (NMI).

***Cratichneumon coruscator* (Linnaeus, 1758)**

DOWN: Cultra, 7 June 1985, swept, MRB and RN (UM) (det. MRB with note cf. *culex*) Donard Park, ♂ 20 June 1985, on bramble *Rubus* bed, RA (UM) (det. MRB); GALWAY: Garryland Wood, ♂, bramble *Rubus*, woodland clearing, RA (UM) (det. MRB); KERRY (South): no locality, ♂ June 1902 (Saunders *et al*., 1903: p. 68).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Cratichneumon culex* (Müller, 1776)**

synonym *Cratichneumon annulator* (Fabricius, 1793) preoccupied

ANTRIM: Cave Hill, ♂, HLO (Johnson, 1912a: p. 77 as *Cratichneumon annulator*); Shanes Castle, ♂ 4 June 1973, RN (UM) (det. JPB); ARMAGH: Oxford Island, ♂ 6 June 1973, AGI (UM) (det. JPB); Poyntzpass, field and hill, May and June, WFJ

(Johnson, 1914a: p. 65 as *Cratichneumon annulator*; Johnson, 1921a: p. 105 as *Cratichneumon annulator*); DONEGAL: Coolmore, September 1916, at flowers, WFJ (Johnson, 1917a: p. 37 as *Cratichneumon annulator*); DOWN: Greencastle, ♂ 20 August 1930, roadside, ♂ (var. *elongatus* Brischke), 18 August 1930, roadside, WFJ (NMI) (conf. JFP) (Johnson, 1931c: p. 139 as *Cratichneumon annulator*); Rostrevor, ♂♂ 31 May and 7 June 1929, woods, WFJ (Johnson, 1930: p. 156 as *Cratichneumon annulator*); Murlough NNR, ♀ 20 August 1972, new dunes, AGI (UM) (det. JPB); MAYO: Belclare, July 1910, JNH; Brackloon Wood, PEG (Morley, 1911a: p. 8 as *Cratichneumon annulator*).

Ireland (Boston and Nash, 1989: p. 136 UM).

[*Cratichneumon dissimilis* (Gravenhorst, 1829)

DONEGAL: Coolmore, roadside among sallows *Salix*, WFJ (Johnson, 1915: p. 130; Perkins, 1953: p. 122 misidentification of *Cratichneumon jocularis*); same locality, September, among sallows *Salix* on the roadside (Johnson, 1916a: p. 18; Perkins, 1953: p. 122 misidentification of *Cratichneumon jocularis*); DOWN: Newcastle, ♂ 25 May, WFJ (Johnson, 1929: p. 135 var. *punctifrons* Holmgren; Perkins, 1953: p. 122 misidentification of *Aoplus ochropis*).]

***Cratichneumon fabricator* (Fabricius, 1793)**

ANTRIM: Belfast, HLO (NMI); Cave Hill near Belfast, HLO (NMI) (Johnson, 1912a: p. 77; Rea's Wood, ♂ 4 June 1985, RN and MRB (UM) (det. MRB); ARMAGH: Acton, Glebe, Poyntzpass, ♂, WFJ, det. CM (Johnson, 1904a: p.256; Johnson, 1904b: p. 262 as *Bratichneumon*); Poyntzpass, hill, June, WFJ (NMI) (Johnson, 1915: p. 130 var.*impugnator* Wesm. In this variety the hind femora are entirely black. It is common here); DONEGAL: Coolmore, ♂♂ August 1917 and September, on roadside among sallows *Salix*, WFJ (NMI) (Johnson, 1914a: p. 64 these specimens, may be referable to the var. *impugnator* Wesm., with the hind femora black; Johnson, 1918: p. 107 a variety of the male, with the head entirely black); Glencolumbkille, ♂ July 1969, swept field, CR (UM) (det. JPB); Portnoo, June and September, WFJ (NMI) (Johnson, 1919a: p.34 also var. *impugnator* Wesmael); DOWN: Ballynabracket, ♂♂ 31 May

1975 and June 1975, PD (UM) (det. MRB); Bangor Stricklands Glen, ♂♂ July 1969, open woodland, CR (UM) (det. JPB); Cultra, ♂♂ 15 June 1983 and 7 June 1985, oaks *Quercus* wood, RN (UM) (det. MRB); Deramore, ♂♂ 20 June 1985, hunting near bramble *Rubus* in open woodland, RA (UM) (det. RN and MRB); Cultra, ♂ 7 June 1985, (UM) (det. MRB); Dromore, August 1925, WFJ; Dundrum, June 1926, WFJ (Johnson, 1927: p. 158 ♂♀); Murlough Bay, ♂ 12 June 1985, coastal grassland, MRB (UM) (det. MRB); Newcastle, ♂♂ 13 May and 11 June, WFJ (NMI) (Johnson, 1929: p. 135 var. *impugnator*); Rostrevor, June and September 1923, WFJ (NMI) (Johnson, 1927: p. 158 ♂♀); same locality, ♀2 July, WFJ (Johnson, 1929: p. 135); Rostrevor, ♂ 14 June 1985, oak *Quercus* wood, RN (UM) (det. MRB); Tollymore, ♂♀ 21 August 1984, MRB (UM) (det. MRB), ♂ 31 May 1975 and ♂ August 1976, RA (UM) (det. MRB); Warrenpoint, 25 August, WFJ (NMI) (Johnson, 1929: p.135 var. *impugnator*); FERMANAGH: Tempo, May, WFJ (Johnson, 1919a: p. 34); GALWAY: Garryland Wood, ♂ 20 June 1975, on mossy rocks, densely shaded woodland, RA (UM) (det. MRB); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 158 ♂♀); MAYO: Achill Sound, {June 1910}, WFJ (NMI); Brackloon Wood near Westport, August 1911, PEG; Mulranny, WFJ; Sraheens (misspelt as Sahreens) Lough, WFJ (Morley, 1911a: p. 8); TYRONE: Moy, ♀♀ 9-19 August 1983, laurel *Prunus laurocerasus*, 17 August 1984, ♂ 2 June 1985 hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB), ♂♂ 27 May-2 June 1985 Malaise trap, MRB and RN (UM).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Cratichneumon fugitivus* (Gravenhorst, 1829)**

DONEGAL: Coolmore, {10} September {1915}, among herbage and sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 18); DOWN: Rostrevor, ♂ {14} June 1923, WFJ (NMI) (Johnson, 1927: p. 158); Warrenpoint, ♂ 10 August {1928}, WFJ (NMI) (Johnson, 1929: p. 135).

***Cratichneumon infidus* (Wesmael, 1848)**

synonym *Cratichneumon liostylus* (Thomson, 1887)

DONEGAL: Coolmore, {9} September {1915}, among sallows *Salix* on the roadside, WFJ (NMI) (Johnson, 1916a: p. 18 as *Cratichneumon liostylus*); Portnoo, September, WFJ (Johnson, 1919a: p. 34 as *Cratichneumon liostylus*, var. with clypeus and face black).

***Cratichneumon jocularis* (Wesmael, 1848)**

DONEGAL: Coolmore, roadside among sallows *Salix*, WFJ (Johnson, 1915: p. 130; Perkins, 1953: p. 122 misidentified as *Cratichneumon dissimilis*); same locality, September, among sallows *Salix* on the roadside (Johnson, 1916a: p. 18; Perkins, 1953: p. 122 misidentified as *Cratichneumon dissimilis*); DOWN: Newcastle, 2♂♂ {29 September 1927}, WFJ (NMI) (Perkins, 1953: p. 139); Cultra (Folk Museum) ♂ 15 June 1983, MRB (UM) (det. MRB and RN).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Cratichneumon rufifrons* (Gravenhorst, 1829)**

ANTRIM: Cave Hill near Belfast, ♂, HLO (NMI) (Johnson, 1912: p. 77); Colin Glen, ♂ 26 June 1977, in fenny vegetation, marshy field, RA (UM) (det. MRB); ARMAGH: Poyntzpass hill, June, WFJ (Johnson, 1914a: p. 64); DOWN: Bangor, ♀ 29 August 1965, CR (UM) (det. MRB); Cultra (Folk Museum), ♂ 15 June 1973, MRB (UM) (det. MRB); Rostrevor, ♂♂ 13-25 June 1929, woods, WFJ (NMI) (Johnson, 1930: p. 156); FERMANAGH: Legalough, ♂ 2 July 1985, MRB and RN (UM) (det. MRB); MAYO: Achill {Sound},{June 1910}, WFJ (NMI); Brackloon, Westport, 1911, PEG; Castlebar, 1909, JNH; Mulranny, WFJ; Westport, 1909, JNH (all Morley, 1911a: p 8).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Cratichneumon semirufus* (Gravenhorst, 1820)**

DONEGAL: Portnoo, {7} June {1918}, bog road, WFJ (NMI) (Johnson, 1919a: p. 34 as *Barichneumon*).

***Cratichneumon sicarius* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, field, May, WFJ (NMI) (Johnson, 1921a: p. 105); DOWN: Rostrevor, ♂♂ 27, 29 and 31 May 1929, woods, WFJ (NMI) (Johnson, 1930: p. 156); LOUTH: Carlingford, {2} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17).

***Cratichneumon versator* (Thunberg, 1824)**

synonym *Cratichneumon pallifrons* (Gravenhorst, 1829)

ANTRIM: no locality, August, JJK (Johnson, 1918: p. 107 as *Cratichneumon pallidifrons*); Rea's Wood, ♂♂ 14-22 May 1985, Malaise, MRB and RN (UM) (det. MRB and RN); ARMAGH: Peatlands, ♂ 13 August 1985, cutover bog, MRB (UM) (det. MRB and RN); DOWN: Newcastle, ♂♂ 13 and 18 May, WFJ (Johnson, 1929: p. 135); Stormont, ♂ 30 May 1969, fields, AGI (UM) (det. MRB and RN); FERMANAGH: Castlecoole, Bendrum Lough, ♂ 24 May 1985, MRB (UM) (det. MRB and RN); TYRONE: Moy, ♀ 29 May 1983, laurel *Prunus laurocerasus*, MRB (UM) (det. MRB and RN).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Cratichneumon viator* (Scopoli, 1763)**

ARMAGH: Peatlands, ♂ 13 August 1985, MRB (UM) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Crypteffigies albilarvatus* (Gravenhorst, 1820)**

DOWN: Cultra, ♂♂ 7 June 1985, swept, MRB (UM) (det. MRB and RN); Newcastle, ♂♂ 13, 18 and 26 May, WFJ (NMI) (Johnson, 1929: p. 135 as *Cratichneumon*); Rostrevor, ♂ 31 May 1975, oakwood *Quercus*, MRB and RN (UM) (det. MRB and RN).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Crypteffigies lanius* (Gravenhorst, 1829)**

ANTRIM: Belfast, Barnett's Park, ♂ 14 May 1975, AGI (UM) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

[*Crytea erythraea* (Gravenhorst, 1820)

ARMAGH: Poyntzpass, single specimen July, in one of my fields, WFJ (Johnson, 1913: p. 138 as *Melanichneumon*; Perkins, 1953: p. 123 misidentification of *Barichneumon sanguinator* (*fide* Stelfox).]

***Crytea sanguinator* (Rossi, 1794)**

ANTRIM: Killead, August 1923, WFJ (Johnson, 1927: p. 158 as *Melanichneumon*, ♂♀); ARMAGH: Poyntzpass, {2} August {1915}, in field, WFJ (NMI) (Johnson 1916: p. 18 as *Melanichneumon*); same locality, single specimen July, in one of my fields, WFJ (Johnson, 1913: p. 138 as *Melanichneumon*; Perkins, 1953: p. 123 misidentification as *Melanichneumon erythraeus* (*fide* Stelfox (now *Crytea*)); DONEGAL: Portnoo, September, quite a number, cliff, WFJ (Johnson, 1919a: p. 34 as *Melanichneumon*); DOWN: Dromore, August 1925, WFJ (Johnson, 1927: p. 158 as *Melanichneumon*); Newcastle, ♂ 27 August {1927}, WFJ (NMI) (Johnson, 1929: p. 135 as *Melanichneumon*); Rostrevor, {12} September 1925, WFJ (NMI) (Johnson, 1927: p. 158 as *Melanichneumon*, ♂♀); KERRY (South): no locality, June 1902 (Saunders *et al*., 1903: p. 68 as *Melanichneumon*).

***Ctenichneumon castigator* (Fabricius, 1793)**

ANTRIM: Rea's Wood, ♂ 23 August 1973, AGI (UM) (det. JPB, *fide* MRB); DOWN: Holywood, ♀ 11 August 1973, PD (UM) (det. MRB); Whitepark Bay, ♂ 4 June 1985, MRB and RN (UM) (det. MRB); FERMANAGH: Tempo, CL (Johnson, 1919a: p. 35 a female var. with legs black except the inside of the front tibiae); Enniskillen, ♂ 14 July 1970, CR (UM) (det MRB) (unpublished); KERRY: Killarney, August 1924, June 1927 and October 1933, EFB (NMI); Lake (L.) Side, Killarney, 4 September 1930, EFB (NMI); KILDARE: Maynooth, 5 October 1948, T. Brady (NMI) (all unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ctenichneumon edictorius* (Linnaeus, 1758)**

synonym *Ctenichneumon fossorius* of authors

MAYO: Sraheens Lough, ♂ June 1910, WFJ (Morley, 1911a: p. 9 as *Ctenichneumon* fossorius).

***Ctenichneumon panzeri* (Wesmael, 1845)**

Ireland (Broad, 2006).

***Diphyus amatorius* (Müller, 1776)**

ARMAGH: Armagh, WFJ (Johnson, 1904a: 256 as *Amblyteles*); Poyntzpass, September, field, WFJ (Johnson, 1922b: p. 69 as *Amblyteles*).

***Diphyus castanopyga* (Stephens, 1835)**

DOWN: Murlough National Nature Reserve (J4034), ♀ 28 August 1973, dune slacks, AGI (UM) (det. JPB, *fide* RN) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Diphyus luctatorius* (Linnaeus, 1758)**

synonym *Amblyteles litigiosus* Wesmael, 1854

DOWN: Greencastle, ♂ 16 August 1930, WFJ (NMI) (det. JFP) (unpublished); Newcastle, ♂ 17 June, WFJ (Johnson, 1929: p. 135 as *Amblyteles litigiosus*); Warrenpoint, ♂ 17 August, WFJ (Johnson, 1929: p. 135 as *Amblyteles litigiosus*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Diphyus mercatorius* (Fabricius, 1793)**

synonym *Amblyteles infractorius* of authors

ARMAGH: Poyntzpass field, October, at late flowers of angelica *Angelica*, WFJ (Johnson, 1920a: p. 8 as *Amblyteles infractorius* Panzer).

***Diphyus palliatorius* (Gravenhorst, 1829)**

ANTRIM: Cave Hill Road, August, HLO (Johnson, 1913: p. 139 as *Amblyteles*); Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 158 as *Amblyteles*, ♂♀); Cave Hill, ♀ April 1985, RT (UM) (det. MRB); Glenarm, 3♂♂ 3 August 1985, in dense undergrowth, RA (UM) (det. MRB); ARMAGH: Acton Glebe, Poyntzpass, WFJ, det. CM (NMI) (Johnson, 1904a: p. 256 as *Amblyteles*; Johnson, 1904b: p. 262 as *Amblyteles*); CORK: Glengariff, ♂ 14 June 1901, JWY (Morley, 1902: p. 54 as *Pseudamblyteles*); DONEGAL: Muckish Quarry, ♀ 2 April 1969, CR (UM) (det. MRB); Portnoo, {9 September 1918}, cliff on vetch, WFJ (NMI) (Johnson, 1919a: p. 35 as *Amblyteles*, var. *erythropygus* Gravenhorst, the yellow and lack form); DOWN: Bangor, Stricklands Glen, ♂ June 1965, CR (det. JPB); Carngaver, ♂ 1968, CR (det. JPB); Quoile, ♀11 August 1976, in undergrowth, RA (UM) (det.MRB); Rostrevor, ♂19 July 1975, oak *Quercus* woodland, RN (UM) (det.MRB); Dromore, August

1925, WFJ (NMI) (Johnson, 1927: p. 158 as *Amblyteles*, ♂♀); Newcastle, ♀♀31 May and ♂ 17 September, WFJ (NMI) (Johnson, 1929: p. 135 as *Amblyteles*); Rostrevor, April 1926, WFJ (Johnson, 1927: p. 158 as *Amblyteles*, ♂♀); FERMANAGH: Cuilcagh Mountain, ♂ 31 July 1985, MB and RN (UM) (det. MRB); Marble Arch, ♂ 31 July 1985, MRB and RN (UM) (det. MRB and RN); KERRY: Parknasilla, ♂ 24 July 1901, JWY (Morley, 1902: p. 54 as *Pseudamblyteles*); LONDONDERRY: Creevedonnell, ♀ 9 August 1985, MRB (UM) (det. MRB); MAYO: Clare Island, ♂ 27 July 1910, Praeger (Morley, 1911a: p. 9 as *Amblyteles*); Mulranny [Mallaranny], CM (NMI) (Johnson, 1919a: p. 35 as *Amblyteles*, both red and black forms).

***Diphyus quadripunctorius* (Müller, 1776)**

ARMAGH: Acton Glebe, Poyntzpass, WFJ, det. CM (NMI) (Johnson, 1904a: p. 256 as *Amblyteles.* Var. with black abdomen; Johnson, 1904b: p. 262 as *Amblyteles*. Var. with black abdomen); CLARE: Corofin 25 April 1985, road through deciduous woodland/verge, RN (UM) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Diphyus septemguttatus* (Gravenhorst, 1829)**

DOWN: Bangor, Stricklands Glen, ♂ July 1969, CR (UM) (det. JPB, *fide* RN); Tollymore (J3532), ♂ August 1976, deciduous woodland edge, RA (UM) (both Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

****Diphyus trifasciatus* (Gravenhorst, 1829)** **New to Ireland**

DONEGAL: Portnoo, ♀9 September 1918, cliff, WFJ (NMI) (det. AR as *Amblyteles*); DOWN: Newcastle, ♂ 27 August 1927, WFJ (NMI) (det. AR as *Amblyteles*).

***Eutanyacra crispatoria* (Linnaeus, 1758)**

DOWN: Murlough National Nature Reserve (J4135), ♀ 13 April 1975, swept sallow *Salix* blossom, CR (UM) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Eutanyacra glaucatoria* (Fabricius, 1793)**

DOWN: Rostrevor, ♀ 16 June 1930, in garden, WFJ (NMI) (det. AR) (Johnson,

1931a: p. 53 *teste* Dr Roman).

***Exephanes fulvescens* Vollenhoven, 1875**

synonym *Exephanes ulbrichti* Hinz, 1957

ANTRIM: Rea's Wood, ♀ 18 September 1976, swept on low vegetation along lough shore, RA (UM) (Boston and Nash, 1989: p. 135 as *Exephanes ulbrichti*).

Ireland (Boston and Nash, 1989: p. 136 as *Exephanes ulbrichti*. UM).

***Exephanes ischioxanthus* (Gravenhorst, 1829)**

synonym *Exephanes hilaris* (Gravenhorst, 1829)

ANTRIM: Killead, August 1923, WFJ (NMI); LOUTH: Termonfeckin, July and August 1924, WFJ (NMI) (both Johnson, 1927: p. 158 as *Exephanes hilaris*, ♂).

***Exephanes occupator* (Gravenhorst, 1829)**

DOWN: Greencastle, ♂ 23 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140); Rostrevor, Victoria Square, ♂♂ 28 August and 6 September 1929, at wild carrot *Daucus carota*, WFJ (Johnson, 1930: p. 156).

***Exephanes riesei* (Habermehl, 1916)**

synonym *Exephanes amabilis* Kriechbaumer, 1895 preoccupied

MEATH: no locality, ♀ September 1922, G. L. R. Hancock (det. G. Heinrich) (Perkins, 1953: p. 141 as *Exephanes amabilis*).

***Exephanes venustus* (Tischbein, 1876)**

synonym *Exephanes caelebs* Kriechbaumer, 1890

ANTRIM: Rea's Wood, ♀ 18 September 1976, swept on low vegetation along lough shore, RA (UM) (unpublished); CAVAN: no locality, ♀ 31 May 1936, AAL; Arva Road, sandpit, ♀ 21 May 1934, RCF; WICKLOW: Enniskerry, ♀ 25 August 1935, JFP (BMNH) (all Perkins, 1953: p. 141 as *Exephanes caelebs*).

Ireland (Perkins, 1960: p. 204 as *Exephanes caelebs*; Boston and Nash, 1989: p. 136 as *Exephanes caelebs*. UM; Hinz and Horstmann, 2000: p. 24 ex *Amphipoea crinanensis* (Burrows) [Lepidoptera].)

***Hepiopelmus melanogaster* (Gmelin, 1790)**

Ireland (Broad, 2006).

***Homotherus locutor* (Thunberg, 1824)**

synonym *Barichneumon albicinctus* (Gravenhorst, 1829) preoccupied

ANTRIM: Belfast, HLO (NMI); Rea's Wood, ♂ 4 June 1985, RN and MRB (UM) (det. RN and MRB) (unpublished); ARMAGH: Poyntzpass, WFJ (Johnson, 1912a: p. 77 as *Barichneumon albicinctus*); same locality, June 1916, in fields, WFJ (Johnson, 1917a: p. 38 as *Barichneumon albicinctus*); same locality, March, November and December, moss in wood, WFJ (NMI) (Johnson, 1920c: p. 65 as *Barichneumon albicinctus*); Peatlands National Nature Reserve, ♂ 13 August 1969, MRB (UM) (unpublished); DONEGAL: Coolmore, September, on Umbelliferae on the roadside, WFJ (NMI) (Johnson, 1914a: p. 65 as *Barichneumon albicinctus*); same locality, September, among sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 18 as *Barichneumon albicinctus*); Portnoo, ♂♂ September 1917, among sallows *Salix* and at flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1918: p. 107 as *Barichneumon albicinctus*); Portnoo, ♂♂♀♀ June and September, WFJ (NMI) (Johnson, 1919a: p. 34 as *Barichneumon albicinctus*); DOWN: Dundrum, June 1926, WFJ (NMI); Newcastle, August 1926, WFJ; Rostrevor, September 1925, WFJ (all Johnson, 1927: p. 158 as *Barichneumon*); Rostrevor, ♂ 10 June 1983, oak *Quercus* woods, AGI (UM) (det. JPB, RN and MRB); Cultra, ♂ 15 June 1985, swept in flowery meadow, MRB and RN (UM) (det. RN and MRB); FERMANAGH: Marble Arch, ♂ 31 July 1985, MRB and RN (UM) (det. MRB and RN) (all unpublished); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Barichneumon albicinctus*); MAYO: Achill Sound, ♂♂ June 1910, WFJ (NMI); Croaghpatrick, ♀ July 1910, at 2500ft, CM (Morley, 1911a: p. 9 as *Barichneumon albicinctus*); TYRONE: Moy, ♂♂ 2 June 1985 and 25 September 1983, hawthorn *Crataegus* herbacous verge, MRB (UM) (det. MRB and RN) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Homotherus magus* (Wesmael, 1855)**

DOWN: Tollymore Forest Park, ♂ 21 August 1984, mixed deciduous woodland floor (oak *Quercus*/beech *Fagus*), MRB (UM) (Boston and Nash, 1989: pp 135-136 as

Cratichneumon).

Ireland (Boston and Nash, 1989: p. 136 as *Cratichneumon*. UM).

***Homotherus varipes* (Gravenhorst, 1829)**

ARMAGH: Peatlands National Nature Reserve, ♀ 3 August 1969, MRB (UM); DOWN: Cultra, ♂ 7 June 1985, swept in flowery meadow, MRB and RN (UM) (both Boston and Nash, 1989: p. 135 as *Cratichneumon*); Tipperary Wood (Wd), ♀ 3 June 1961, AWS (NMI) (det. JFP as *Cratichneumon*) (unpublished); FERMANAGH: Marble Arch, ♂ 26 May 1984, MRB (UM) (Boston and Nash, 1989: p. 135 as *Cratichneumon*); DUBLIN: Bushy Park, ♀ 21 December 1955, AWS (NMI) (det. JFP as *Cratichneumon*) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 as *Cratichneumon*. UM).

***Hoplismenus axillatorius* (Thunberg, 1824)**

synonym *Hoplismenus albifrons* (Gravenhorst, 1829)

Ireland (Boston and Nash, 1989: p. 136 as *Hoplismenus albifrons*. UM).

***Hoplismenus bidentatus* (Gmelin, 1790)**

DOWN: Castleward, ♂ 25 July 1985, bramble *Rubus*/scrub, MRB (UM) (Boston and Nash, 1989: pp 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon albiger* Wesmael, 1845**

synonym *Ichneumon tempestivus* Holmgren, 1864

ANTRIM: Belfast, ♂ 12 August 1973, RN (UM) (det. RN and MRB) (unpublished); ARMAGH: Acton Wood, June, on the wing, WFJ (Johnson, 1916a: p. 19); Armagh, WFJ (Johnson, 1904a: 256 as *Ichneumon tempestivus*); Poyntzpass, January, moss in wood, WFJ (Johnson, 1920c: p. 66 as *Ichneumon tempestivus*); same locality, fields, ♀ 5 June 1906, August, WFJ (Johnson, 1907: p. 246; Morley, 1907b: p. 160; Johnson, 1921a: p. 105); same locality, November and December, in moss, moss in wood, WFJ (NMI) (Johnson, 1913: p. 139; Johnson, 1920c: p. 66); DOWN: Newcastle, ♂♂ 11 July and 17 August, WFJ; Rostrevor, ♂ 8 July, WFJ (Johnson, 1929: p. 135 as *Ichneumon tempestivus*); same locality, ♂♂ 15 and 23 August 1929, mill, ♂ 7 August

1929, field opposite, WFJ (Johnson, 1930: p. 156 as *Ichneumon tempestivus*); Murlough National Nature Reserve (J4135), ♀ 5 June 1976, sand dunes, RN (UM) (det. MRB) (unpublished); FERMANAGH: Summer Hill, ♀♀ 14 December 1905, moss on lawn, WFJ (NMI) (Johnson, 1907: p. 246; Morley, 1907b: p. 160; Johnson, 1920c: p. 66).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon amphibolus* Kriechbaumer, 1888**

ARMAGH: Poyntzpass, ♀ 17 September 1919, in field among herbage, WFJ; DONEGAL: Portnoo, ♀ 17 September 1918, among grass and vetches in a small meadow on the cliff, WFJ (both Johnson, 1920b: p. 19 determined by A. Roman; Morley, 1921: p. 53; Perkins, 1953: p. 126 no specimen under this name is present in the Johnson collection. It is a species that is completely unknown to me).

***Ichneumon aquilonius* Perkins, 1953** **New to Ireland**

DUBLIN: Slade Brook (Bk), ♀ 27 September 1942, AWS (NMI) (det. JFP).

***Ichneumon bucculentus* Wesmael, 1845**

ANTRIM: Ballymoney, ♀ 1973 (UM) (det. MRB); Glenarm, ♀ 26 June 1985, MRB (UM) (det. MRB) (unpublished); ARMAGH: Poyntzpass, {8 July 1912}, WFJ (NMI) (Johnson, 1913: p. 139); DONEGAL: Coolmore, August 1912, WFJ (Johnson, 1913: p. 139); same locality, September, at Umbelliferae, WFJ (Johnson, 1916a: p. 18); Coxtown, ♂, WFJ (NMI) (det. CM) (Johnson, 1912a: p. 77); DOWN: Ballyworkan near Portadown, July and August, WFJ (Johnson, 1913: p. 139); Darragh Island, ♀ 9 September 1985, RN (UM) (det. MRB) (unpublished); Greencastle, ♂♂ 18 and 15 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: pp 139-140); Rostrevor, ♂♂ 28 July, WFJ (NMI); Warrenpoint, ♂♂ 12 September, WFJ (NMI) (both Johnson, 1929: p.135); LOUTH: Termonfeckin, ♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 158).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon caloscelis* Wesmael, 1845**

ARMAGH: Poyntzpass, July, in fields at Umbelliferae, WFJ (Johnson, 1914a: p. 65); same locality, in stable window and in field, WFJ (NMI) (Johnson, 1916a: p. 19);

DONEGAL: Coolmore, September 1912, WFJ (NMI) (Johnson, 1913: p. 139); same locality, September, on roadside at wild carrot *Daucus carota*, WFJ (Johnson, 1916a: p. 19); same locality, September 1916, among sallows *Salix*, WFJ (NMI) (Johnson, 1917a: p. 38); Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 35); DOWN: Dromore, August 1925, WFJ (NMI); Dundrum, July 1926, WFJ (both Johnson, 1927: p. 158 ♂); Newcastle, August, August 1926, WFJ (NMI) (Johnson, 1913: p. 139; Johnson, 1927: p. 158 ♂); Rostrevor, ♂ July 1922, crawling on the earth in garden, WFJ (Johnson, 1923: pp 36 and 38); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 158 ♂).

***Ichneumon cessator* Müller, 1776**

DONEGAL: Portnoo, September 1917, among sallows *Salix*, WFJ (Johnson, 1918: p. 107); DOWN: Murlough National Nature Reserve (J4039), ♂ June 1976, sand dunes, MRB and RN (UM) (det. MRB) (unpublished); Rostrevor, ♂ 8 August 1929, field opposite, WFJ (Johnson, 1930: p. 156).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon computatorius* Müller, 1776**

LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17).

***Ichneumon confusor* Gravenhorst, 1820**

synonym *Ichneumon confusorius* Gravenhorst, 1829

ARMAGH: Acton Wood, June, flying over brambles *Rubus*, WFJ (NMI) (Johnson, 1916a: p. 19); Armagh, WFJ (Johnson, 1904a: p. 256 as *Ichneumon confusorius*); Poyntzpass, on hill, July, at Umbelliferae, WFJ (NMI) (Johnson, 1916a: p. 19); DONEGAL: Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 35 as *Ichneumon confusorius*); DOWN: Bangor, ♂ 8 August 1965, AI (UM) (det. MRB and RN) (unpublished); Dundrum, ♀ June 1926, WFJ (Johnson, 1927: p. 158 as *Ichneumon confusorius*); Greencastle, 27 August 1930, on wall of house, WFJ (NMI) (Johnson, 1931c: p. 140 as *Ichneumon confusorius*); MAYO: Brackloon Wood, ♂♂, PEG; {Louisburgh} Carrowmore Hill, 500ft, ♀ July, beneath a sod, CM (NMI); Clare

Island, on road to chapel, ♂, CM (NMI); same locality, at 700 and 1500ft, ♀♀, WFJ (NMI); Mulranny, ♂♂, PEG (Morley, 1911a: p. 9 as *Ichneumon confusorius*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon emancipatus* Wesmael, 1845**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p.158 ♂); DONEGAL: Coolmore, ♂ September 1916, on the roadside, WFJ (NMI) (Johnson, 1917a: p. 37 I am not quite satisfied as to its identity, p. 38); DOWN: Rostrevor, June 1924, WFJ; same locality, ♂ 20 July, WFJ (NMI) (Johnson, 1929: p. 135); Warrenpoint, ♂ 17 August, WFJ (Johnson, 1929: p. 135); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (both Johnson, 1927: p. 158 ♂); MAYO: Mulranny, ♂ July 1910, PEG (Morley, 1911a: p. 9).

***Ichneumon extensorius* Linnaeus, 1758**

Ichneumon extensorius ssp. *militaris* Gravenhorst, 1820

ANTRIM: Garfield Street, Belfast, HLO (Johnson, 1912a: p. 77); Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 158 ♀); same locality, ♀ August 1923, WFJ (Johnson, 1927: p. 158 as *Ichneumon militaris*); same locality, ♀ August 1923, WFJ (Johnson, 1927: p. 158 as *Ichneumon militaris*); ARMAGH: Armagh, ♀, WFJ (Johnson, 1904a: p. 256); Poyntzpass, including ♀ 15 August 1914, WFJ (NMI) (Johnson, 1907: p. 246; Morley, 1907b: p. 160; Morley, 1916: p. 97 as *Ichneumon militaris*; Johnson, 1918: p. 107 a small form of the female...running on the road on April 2nd); same locality, February, November and December, moss on roadside and moss in wood, WFJ (Johnson, 1920c: p. 66); same locality, April, August, at flowers of angelica *Angelica*, at flowers of hedge parsley *Torilis*, WFJ (Johnson, 1915: p. 139 as *Ichneumon militaris*. Not a common species; Johnson, 1916a: p. 18 as *Ichneumon militaris*; Johnson, 1919a: p. 35 as *Ichneumon militaris*); same locality, June, at hogweed *Heracleum* in field, WFJ (NMI) (Johnson, 1917a: p. 38 as *Ichneumon militaris*); same locality, April, August, at flowers of angelica *Angelica*, at flowers of hedge parsley *Torilis*, WFJ (Johnson, 1915: p. 139 as *Ichneumon militaris*. Not a common species; Johnson, 1916a: p. 18 as *Ichneumon militaris*; Johnson, 1919a: p. 35

as *Ichneumon militaris*); same locality, June 1916, at hogweed *Heracleum* in field, WFJ (Johnson, 1917a: p. 38 as *Ichneumon militaris*); CORK: Glengarriff, ♀ 3 August 1908, HWA (Morley, 1908b: p. 276); DONEGAL: Coolmore, August and September 1912, WFJ (NMI) (Johnson, 1913: p. 139); Portnoo, September, at flowers, WFJ (NMI) (Johnson, 1918: p. 107); DOWN: Dundrum, August 1926, WFJ (Johnson, 1927: p. 158 ♀); Greencastle, small ♀ 16 August 1930, sandhills, WFJ (Johnson 1931c: p. 140); Newcastle, June 1926, WFJ (NMI) (Johnson, 1927: p. 158 ♀); Rostrevor, ♀ 8 July, WFJ (Johnson, 1929: p. 135 small, 8mm); same locality, ♂ 7 August 1929, field opposite, WFJ (Johnson, 1930: p. 156); Warrenpoint, ♂♂ 24 and 27 July, 17 August, WFJ (NMI) (Johnson, 1929: p. 135); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (Speight and Healy, 1977: p. 153); LOUTH: Carlingford, July, under a large stone on a bank, WFJ (Johnson, 1914a: p. 65); Edentubber, April, high ground, WFJ (NMI) (Johnson, 1907: p. 246; Johnson, 1920c: p. 66); Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 158 ♀); MAYO: Mulranny, ♂ July 1910, PEG (Morley, 1911a: p. 9); MONAGHAN: Scotstown, ♀ 15 March 1894, in moss, WFJ, det. CM (NMI) (Johnson, 1904a: p. 256; Johnson, 1904: p. 262; Johnson, 1920c: p. 66).

***Ichneumon formosus* Gravenhorst, 1829** **New to Ireland**

WEXFORD: Cahore, ♂ 21 July 1929, AWS (NMI) (det. JFP).

***Ichneumon gracilentus* Wesmael, 1845**

ANTRIM: Belfast, Dixon Park (J3167), ♂ 12 August 1973, RN (UM) (det. JPB as sp. near *gracilentus*, det. MRB as *gracilentus*); Glenarm, ♀ 11 April 1976, in moss, woodland, CR (UM) (det. MRB); Rea's Wood, ♀♀ 22 May 1985 and 11 June 1985, Malaise trap in deciduous woodland with marshy patches, MRB and RN (UM) (all unpublished); ARMAGH: Poyntzpass hill, ♀♀ May and 19 October, WFJ (NMI) (Johnson, 1920a: p. 8); Poyntzpass, January, moss in wood, WFJ (NMI) (Johnson, 1920c: p. 66); DONEGAL: Coolmore, September, on Umbelliferae, rare, WFJ (NMI) (Johnson, 1914a: p. 65); DOWN: Murlough NNR, ♂ 2-9 October 1984, new dunes, Malaise trap, RN and MRB (UM) (det. MRB and RN); Dane's Wood, Clandeboye

Estate, ♂ 25 August 1975, swept vegetation, AGI (UM) (det. JPB, *fide* MRB) (both unpublished); Rostrevor, ♂ September 1923, WFJ (NMI) (Johnson, 1927: p. 158); Tollymore, ♀ 21 August 1984, mixed deciduous woodland (oak *Quercus* and beech *Fagus*), MRB and RN (UM) (det. MRB and RN) (unpublished); FERMANAGH: Summer Hill, ♀ 14 December 1905, WFJ (NMI) (Johnson, 1907: p. 246; Morley, 1907b: p. 160); MAYO: Achill Sound, June 1910, WFJ (NMI); Belclare, ♀ July 1910, JNH (NMI) (Morley, 1911a: p. 9); TYRONE: Knockmany Forest, ♀ 18 May 1983, MRB (UM) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon gracilicornis* Gravenhorst, 1829**

ARMAGH: Poyntzpass, July, in field, at Umbelliferae, WFJ (NMI) (Johnson, 1916a: p. 19); DONEGAL: Coolmore, on roadside, WFJ (Johnson, 1915: p. 130); DOWN: Rostrevor, ♀ September 1923, WFJ (NMI) (Johnson, 1927: p. 158); Warrenpoint, ♂ 24 August, WFJ (NMI) (Johnson, 1929: p. 135); KERRY (South): no locality, ♀ June 1902, well-marked example (Saunders *et al*., 1903: p. 68); Rossbeigh, June, HD (Morley, 1903: p. 144).

[*Ichneumon gratus* Wesmael, 1855

DOWN: Newcastle, ♂ 25 May, WFJ (Johnson, 1929: p. 135; Perkins, 1953: p. 128 this specimen is a female of *Chasmias motatorius*).]

***Ichneumon haemorrhoicus* Kriechbaumer, 1887**

synonym *Ichneumon albicollis* Wesmael, 1857

DOWN: Rostrevor, ♂15 August 1929, in a field, WFJ (NMI) (Johnson, 1930: p. 156).

***Ichneumon haglundi* Holmgren, 1864**

LOUTH: Termonfeckin, ♂ August 1924, WFJ (NMI) (Johnson, 1927: p. 158).

***Ichneumon inquinatus* Wesmael, 1845**

MAYO: Sraheens Lough, ♀ June 1910, WFJ (Morley, 1911a: p. 9).

***Ichneumon insidiosus* Wesmael, 1844**

ARMAGH: Poyntzpass, January and May, roadside and in moss in wood, WFJ (NMI) (Johnson, 1920c: p. 66; Johnson, 1921a: p. 105); DONEGAL: Coolmore, August

1912, WFJ (NMI) (Johnson, 1913: p. 139); FERMANAGH: Summer Hill, ♀ 14 December 1905, moss on lawn, WFJ (Johnson, 1907: p. 246; Morley, 1907b: p. 160; Johnson, 1920c: p. 66).

***Ichneumon ligatorius* Thunberg, 1824**

synonym *Ichneumon gradarius* Wesmael, 1848

MONAGHAN: Scotstown, ♀ 15 March 1894, in moss, WFJ (det. CM) (Johnson, 1904a: p. 256 as *Ichneumon gradarius*; Johnson, 1904b: p. 262 as *Ichneumon gradarius*; Johnson, 1920c: p. 66 as *Ichneumon gradarius*).

***Ichneumon melanotis* Holmgen, 1864**

synonym *Ichneumon macrocerus* Thomson, 1886

ANTRIM: Belfast, ♀ July 1983, RP (UM) (det. MRB) (unpublished); ARMAGH: Poyntzpass, November, in moss, WFJ (NMI) (Johnson, 1913: p. 139); DONEGAL: Portnoo, September 1917, at wild carrot *Daucus carota*, uncommon, WFJ (NMI) (Johnson, 1918: p. 107); DOWN: Rostrevor, ♀ 16 May 1929, woods, ♂ 15 July 1929, mill, WFJ (NMI) (Johnson, 1930: p. 156 as *Ichneumon macrocerus*); Warrenpoint, ♂ 24 July, WFJ (NMI) (Johnson, 1929: p. 135 as *Ichneumon macrocerus*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon memorator* Wesmael, 1845**

DOWN: Warrenpoint, ♂ 10 August 1929, WFJ (NMI) (det. WFP) (unpublished); MAYO: Carrowmore Lough, ♂ (Morley, 1911a: p. 9).

***Ichneumon molitorius* Linnaeus, 1761**

DUBLIN: Santry Demense, ♀ February 1903, JNH (NMI) (Morley, 1911c: p. 20; Anon., 1913: p. 43); LOUTH: Termonfeckin, ♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 158).

***Ichneumon oblongus* Schrank, 1802**

synonym *Ichneumon latrator* Fabricius, 1781 misidentification

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 158 as *Ichneumon latrator*); ARMAGH: Poyntzpass, ♀♀ 19 November 1904 and ♀ 8 March 1906, in moss, including var. *means* Gravenhorst, WFJ (NMI) (Johnson, 1907: p. 246 as

Ichneumon latrator; Morley, 1907b: p. 159 as *Ichneumon latrator*); same locality, January, February and March, moss in wood, WFJ (Johnson, 1920: p. 66 as *Ichneumon latrator*. Also var. *means* in January); DONEGAL: Coolmore, September 1912 and August 1917, among herbage in a lane, WFJ (NMI) (Johnson, 1913: p. 138 as *Ichneumon latrator*. Including var. *means*; Johnson, 1918: p. 107 var *means*; a variety with the fourth segment entirely red and the sixth white marked); same locality, September, at Umbelliferae, WFJ (NMI) (Johnson, 1916a: p. 18 as *Ichneumon latrator*. A remarkable variety of this common species with the scutellum white (♀)); Portnoo, September, cliff, WFJ (NMI) (Johnson, 1919a: p. 35 as *Ichneumon latrator*. Also var. *means*); DOWN: Greencastle, ♂♀ common, WFJ (NMI) (Johnson, 1931c: p. 139 as *Ichneumon latrator*); Newcastle, 17 August, WFJ (Johnson, 1929: p. 135 as *Ichneumon latrator*); Rostrevor, July 1922, garden, WFJ (Johnson, 1923: p. 38 as *Ichneumon latrator*); same locality, 23 and 27 July, WFJ (NMI) (Johnson, 1929: p. 135 as *Ichneumon latrator*); Warrenpoint, ♂ 24 July, WFJ (Johnson, 1929: p. 135 as *Ichneumon latrator*); FERMANAGH: Summer Hill, ♀♀ 14 December 1905, including var. *means*, WFJ (NMI) (Johnson, 1907: p. 246 as *Ichneumon latrator*; Morley, 1907b: p. 159 as *Ichneumon latrator*); same locality, December, moss on lawn (Johnson, 1920: p. 66 as *Ichneumon latrator*); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 158 as *Ichneumon latrator*); MAYO: Achill, ♀, JNH (as var. *means* Grav.); Carrowmore Lough, ♂ July, on reeds, CM (Morley, 1911a: p. 9 as *Ichneumon latrator*).

Ireland (Boston and Nash, 1989: p. 136 as *Ichneumon latrator*. UM).

***Ichneumon primatorius* Forster, 1771**

ARMAGH: Poyntzpass field, ♂♂ September and October, WFJ (Johnson, 1920a: p. 8); WATERFORD: Tramore, ♀ July, LHBW (NMI) (Johnson, 1914a: p. 65; Johnson, 1920a: p. 8); WEXFORD: Kilmore, ♂, Bignell Collection (Perkins, 1953: p. 120 this specimen had been misidentified as *Protoichneumon fusorius*).

***Ichneumon sarcitorius* Linnaeus, 1758**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 158, ♂♀);

ARMAGH: Poyntzpass, field and hill, May and July, WFJ (NMI) (Johnson, 1914a: p. 65; Johnson, 1920a: p. 8; Johnson, 1921a: p. 105 Dr Roman remarks that the bands on the abdomen of the male which in our specimens are stramineous or flavous are in Sweden white); same locality, August, at flowers of angelica *Angelica*, WFJ (Johnson, 1916a: p. 18 among these was a female with the head entirely black); CORK: Garnish Island, Glengarriff, ♂ 1 July 1985, swept in ornamental garden, JMOC (NMI) (det. MRB) (unpublished); DONEGAL: Coolmore, ♂ September 1916, captured on the outside wall of the bungalow, WFJ (Johnson, 1917a: p. 38); Portnoo, September 1917, among sallows *Salix*, WFJ (Johnson, 1918: p. 107); same locality, ♂ bred from the grey *Dianthecia caesia* (now *Hadena caesia mananii* (Gregson)) (Lepidoptera: Noctuidae), CL (Johnson 1919a: p. 35); Portnoo cliff, June, WFJ (Johnson, 1920a: p. 8); DOWN: Castleward, ♂ 24 July 1985, field with bramble *Rubus*/gorse *Ulex* scrub, MRB (UM); Down Cathedral, ♀ 22 June 1985, feeding on hogweed *Heracleum* in a lane, RA (UM) (det. MRB) (both unpublished); Dundrum, June and July 1926, WFJ (NMI) (Johnson, 1927: p. 158); Greencastle, ♂ 27 August 1930, shore near pier, ♀ 16 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 139); Horse Island, 5 September 1985, RN and MRB (UM) (det. MRB); Newcastle, August 1926, WFJ; River Quoile near Downpatrick, ♂ collected 25 July 1971, emerged from pupa collected 9 August 1971, RN (UM) (det. JPB) (both unpublished); Rostrevor, June 1923, July 1922, August 1922 and September 1923, WFJ (NMI) (Johnson, 1923: p. 36 I took a male...with the apical bands of the abdominal segments nearly as white as those of Swedish specimens. p. 38; Johnson, 1927: p. 158 ♂♀. I took a male at Rostrevor with the abdominal bands pure white); Warrenpoint, 25 August, WFJ (Johnson, 1929: p. 135); KERRY: Kenmare, ♀ 4 July 1901, JWY (Morley, 1902: p. 54 as *Coelichneumon*); Morley, 1903: p. 115); LOUTH: Termonfeckin, August and September 1924, WFJ (NMI) (Johnson, 1927: p. 158, ♂♀); WEXFORD: Kilmore, AB (Morley, 1903: p. 115).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon simulans* Tischbein, 1873**

synonym *Ichneumon subquadratus* Thomson, 1887

ARMAGH: Poyntzpass, 3♀♀ 14 December 1905, in moss, WFJ (Morley, 1907b: p. 160 as *Ichneumon subquadratus*); same locality, August and November, in moss, WFJ (Johnson, 1913: p. 139 as *Ichneumon subquadratus*); same locality, January, moss on lawn, WFJ (NMI) (Johnson, 1920: p. 66 as *Ichneumon subquadratus*); DOWN: Newcastle, ♂ 27 July {1927}, WFJ (NMI) (Johnson, 1929: p. 135 as *Ichneumon subquadratus*); Rostrevor, ♂ 5 July 1930, in field opposite house, WFJ (NMI) (Johnson, 1931a: p. 53); FERMANAGH: Summer Hill, {14} December {1905}, moss on lawn, WFJ (NMI) (Johnson, 1907: p. 246 as *Ichneumon subquadratus*; Johnson, 1920: p. 66 as *Ichneumon subquadratus*); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Ichneumon subquadratus*); Termonfeckin, ♂ August 1924, WFJ (NMI) (Johnson, 1927: p. 158 as *Ichneumon subquadratus*); TYRONE: Moy, ♀ 2 June 1985, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 as *Ichneumon subquadratus*. UM).

***Ichneumon spurius* Wesmael, 1848**

DONEGAL: Portnoo, ♀ {18} September {1918}, cliff, WFJ (NMI) (Johnson, 1919a: p. 35).

***Ichneumon stigmatorius* Zetterstedt, 1838**

synonym *Ichneumon walkeri* Wesmael, 1848

ANTRIM: Rea's Wood, ♀ 11 September 1985, Malaise trap in deciduous woodland with marshy patches, MRB and RN (UM) (Boston and Nash, 1989: pp 135 as *Ichneumon walkeri*); WICKLOW: Seefin, ♀ 23 October 1938, AWS (NMI) (det. JFP as *Ichneumon walkeri*) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM as *Ichneumon walkeri*).

***Ichneumon stramentarius* Gravenhorst, 1820**

Ichneumon stramentarius septentrionalis Holmgren, 1864

ANTRIM: Dunmurry, ♀ September 1984, TD (UM) (Boston and Nash, 1989: p. 135 as *Ichneumon septentrionalis*); ARMAGH: Poyntzpass, {26 August 1909}, WFJ

(NMI) (Johnson, 1912a: p. 77); same locality, August, in fields at angelica *Angelica*, not common, WFJ (NMI) (Johnson, 1914a: p. 65); DONEGAL: Coolmore, September, among sallows *Salix*, WFJ (NMI) (Johnson, 1915: p. 130; Johnson, 1916a: p. 18); DOWN: Bangor, Stricklands Glen, ♀ 1969, CR (Boston and Nash, 1989: p. 135 as *Ichneumon septentrionalis*); Lough Shark, WFJ (NMI) (Johnson, 1912a: p. 77); Newcastle, 29 June {1927}, WFJ (NMI) (Johnson, 1929: p. 135); Rostrevor, ♀ June 1924, WFJ (NMI) (Johnson, 1927: p. 158); same locality, 28 July, WFJ (Johnson, 1929: p. 135); GALWAY: Garryland Wood, ♀ 20 August 1985, in moss on rocks, dense woodland, RA (UM) (Boston and Nash, 1989: p. 135 as *Ichneumon septentrionalis*).

Ireland (Boston and Nash, 1989: p. 136 as *Ichneumon septentrionalis*. UM).

***Ichneumon submarginatus* Gravenhorst, 1829**

DONEGAL: Coolmore, ♂ August 1917, among sallows *Salix*, WFJ (Johnson, 1918: p. 107).

***Ichneumon suspiciosus* Wesmael, 1845**

ANTRIM: Belfast (Botanic Gardens), ♂ 4 May 1975, RN (UM) (det. MRB) (unpublished); ARMAGH: Poyntzpass, August, at angelica *Angelica*, WFJ (NMI) (Johnson, 1916a: p. 18); same locality, January, moss in wood, WFJ (Johnson, 1920c: p. 66); Poyntzpass, Acton Wood, roadside, May, WFJ (Johnson, 1921a: p. 105); DONEGAL: Coolmore 1912, September, WFJ (NMI) (Johnson, 1913: p. 13); same locality, on the roadside, WFJ (Johnson, 1915: p. 130); same locality, September, in porch of the bungalow, WFJ (NMI) (Johnson, 1916a: p. 18); DOWN: Dundrum, June 1926, WFJ (Johnson, 1927: p. 158 ♀); Greencastle, ♂ 24 August 1930, roadside, WFJ (Johnson, 1931c: p. 140); Holywood {1909, ALO} (NMI) (Johnson, 1912a: p. 77); Rostrevor, ♀ October 1925, flew into house, WFJ (Johnson, 1927: p. 158 ♀); same locality, ♂ 12 July 1929, grass plot, ♂ 14 September 1929, WFJ (Johnson, 1930: p. 156); Warrenpoint, ♂ 27 August {1928}, WFJ (NMI) (Johnson, 1929: p. 135); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17); MAYO: Sraheens Lough, ♀♀ June 1910, WFJ (Morley, 1911a: p. 9); TYRONE:

Drumagullion, near Stewartstown, ♀ 25 March, in hibernation, under a stone in a field, NHF (Johnson, 1918: p. 107; Johnson, 1920c: p. 66 taken by the late H. L. Orr); same locality, December, under a stone, WFJ (Johnson, 1920c: p. 66).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Ichneumon terminatorius* Gravenhorst, 1820**

ANTRIM: Magheramore, 5 April 1910, HLO (Johnson, 1912a: p. 77; Johnson, 1920c: p. 66); ARMAGH: Poyntzpass, field, August, at angelica *Angelica*, WFJ (NMI) (Johnson, 1916a: p. 18; Johnson, 1921a: p. 105); KERRY (South): Rossbeigh, June 1902, Donisthorpe (Saunders *et al.,* 1903: p. 68; Morley, 1903: p. 130; Johnson, 1912a: p. 77); LOUTH: Edentubber, 2♀♀ 5 April 1906, moss from high ground, WFJ (Johnson, 1907: p. 246; Morley, 1907b: p. 160; Johnson, 1920c: p. 66); Termonfeckin, ♀ August 1924, WFJ (NMI) (Johnson, 1927: p. 158).

***Ichneumon tuberculipes* Wesmael, 1848** **New to Ireland**

WEXFORD: Clone, ♂ 9 August 1930, AWS (NMI) (det. JFP).

***Ichneumon validicornis* Holmgren, 1864** **New to Ireland**

WICKLOW: Arklow District, ♂ 2 August 1925, AWS (NMI) (another voucher specimen det. AR).

***Ichneumon vulneratorius* Zetterstedt, 1838** **New to Ireland**

SLIGO: Ballymote, {GHC} (NMI).

***Ichneumon xanthorius* Forster, 1771**

ARMAGH: Poyntzpass, June, in stable window, WFJ (Johnson, 1915: p. 130); Poyntzpass hill, May, WFJ (NMI) (Johnson, 1920a: p. 8); DONEGAL: Coolmore, on the roadside among herbage, WFJ (NMI) (Johnson, 1915: p. 130); Portnoo, September 1917, among heather *Calluna vulgaris*, cliff, WFJ (Johnson, 1918: p. 107 var. *flavoniger* Gravenhorst; Johnson, 1919a: p. 35); DOWN: Dundrum, July and August 1926, WFJ (NMI) (Johnson, 1927: p. 158 as *Amblyteles*); Murlough NNR, ♂ June 1976, sand dunes, RN (UM) (det. MRB and RN) (unpublished); Newcastle, ♂ 25 August, WFJ (Johnson, 1929: p. 135 as *Amblyteles*); Rostrevor, Victoria Square, ♂ 17 August 1929, WFJ (NMI); same locality, ♂ 26 August 1929, var. *flavoniger*

Gravenhorst, grass plot, WFJ (both Johnson, 1930: p. 156); LOUTH: Carlingford, July, WFJ (NMI) (Johnson, 1913: p. 138).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Limerodes arctiventris* (Schiødte, 1839)**

synonym *Limerodes arctiventris* (Boie, 1841) preoccupied

DOWN: Greencastle, ♀ 24 August 1930, on the roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Limerodes arctiventris* (Boie)).

***Limerodops elongatus* (Brischke, 1865)**

ANTRIM: Rea's Wood, ♂ August 1976, on umbels, fenny lakeshore, RA (UM) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Limerodops subsericans* (Gravenhorst, 1820)**

DONEGAL: Coolmore, ♀♀ September, among sallows *Salix* on the roadside, WFJ (NMI) (Johnson, 1916a: p. 19 both remarkable forms. One has the scutellum black with a white spot to either side; the other is remarkably large and stout and has the scape of the antennae dark red below, the first and second joints of flagellum black, the following ten wholly or partly white and the remainder black (Johnson, 1916a: p. 19 as *Amblyteles*); Portnoo, ♀, freshly emerged on bell heather *Erica cinerea*, WFJ (NMI) (Johnson, 1919a: p. 35 as *Amblyteles*); DOWN: Greencastle, ♀ 22 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 var. with scutellum and hind body entirely black); Newcastle, ♀ 17 August, WFJ (NMI) (Johnson, 1929: p. 135 as *Amblyteles*); Murlough NNR, ♂ 10 June 1975, sand dunes, RN and HCGC (UM) (det. MRB and RN) (unpublished); LOUTH: Carlingford 1921, June, WFJ (NMI) (Johnson, 1922a: p. 15 as *Amblyteles*. An uncommon form, having the scutellum entirely black, p. 17); MAYO: Westport, ♀ July 1911, JNH (NMI) (Morley, 1911a: p. 9 as *Amblyteles*).

Ireland (Boston and Nash, 1989: p. 136 UM).

[*Melanichneumon albipictus* (Gravenhorst, 1820)

DOWN: Rostrevor, ♀ 6 September 1930, in greenhouse, WFJ (Johnson, 1931a: p. 53

as *Ichneumon*. Var. *obsoletus* Berthoumieu. A form with scutellum and segments 1-5 of hind body black; Perkins, 1953: p. 123 misidentification of *Barichneumon gemellus*).]

[*Patrocloides sputator* (Fabricius, 1793)

DOWN: Dundrum, ♂ August 1926, WFJ (Johnson, 1927: p. 158 as *Ctenichneumon sputator*; Perkins, 1953: p. 129 the specimens named *sputator* in the Johnson collection are males of *Stenichneumon culpator*); Rostrevor, ♂♂ 6 and 7 August 1929, field opposite, WFJ (Johnson, 1930: p. 156 as *Ctenichneumon sputator* var. *nigriventris* Berthoumieu; Perkins, 1953: p. 129 the specimens named *sputator* in the Johnson collection are males of *Stenichneumon culpator*).]

***Platylabops apricus* (Gravenhorst, 1820)**

ANTRIM: Rea's Wood, ♂ 25 September 1984, Malaise trap in deciduous woodland with marshy patches, MRB and RN (UM) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Platylabops lariciatae* (Kriechbaumer, 1890)**

DOWN: Donard Lodge, Newcastle, ♂♂ 25 July and ♂ 8 August 1965 (NMI), in a larch *Larix* plantation, AWS (conf. JFP); Drinnahilly, ♂ 1 August 1965, in larch *Larix* plantation, AWS (Stelfox, 1966c: p. 242 as *Platylabus*).

***Platylabops virginalis* (Wesmael, 1845)** **New to Ireland**

DOWN: Rostrevor, ♂ 5 August 1924, WFJ (NMI) (det. AR as *Barichneumon*).

***Probolus alticola* (Gravenhorst, 1820)**

ARMAGH: Poyntzpass hill and field, June and September, WFJ (NMI) (Johnson, 1914a: p. 65; Johnson, 1920a: p. 8); DONEGAL: Coolmore, 2♂♂ on the wing and 3♀♀ among herbage on a grassy bank, September 1916, WFJ (NMI) (Johnson, 1917a: p. 38); Portnoo, September, WFJ (NMI); FERMANAGH: Tempo, CL (both Johnson, 1919a: p. 35).

***Probolus crassulus* Horstmann, 2000**

synonym *Probolus concinnus* Wesmael, 1853

DOWN: Inch Abbey, River Quoile, ♂ 22 June 1985, swept from dock *Rumex*, river

bank, RA (UM) (det. MRB as *Probolus concinnus*) (unpublished); KERRY: Parknasilla, ♀ 14 July 1901, JWY (Morley, 1902: p. 54 as *Probolus concinnus*; Morley, 1903: p. 213 as *Probolus concinnus*).

Ireland (Boston and Nash, 1989: p. 136 as *Probolus concinnus*. UM).

***Probolus culpatorius* (Linnaeus, 1758)**

DOWN: Greencastle, ♂ 16 August 1930, sandhills, WFJ (Johnson, 1931c: p. 140 as *Amblyteles culpatorius* var. *oblongatus* Tischb.); Rostrevor, ♂ 1 September 1930, in a field near the woods, WFJ (Johnson, 1931a: p. 53 as *Amblyteles*).

***Spilichneumon celenae* Perkins, 1953**

WICKLOW: Tonlagee Mountain (Mt.), 2♂♂ (allotype and paratype) 22 August 1937, AWS and GMS (BMNH) (Perkins, 1953: p. 151).

Ireland (Perkins, 1953: p. 151 ♀ (holotype) ex Haworth's minor *Celaena* [*Celena*] *haworthii* (Curtis) (Lepidoptera: Noctuidae), 1884, W. V. de. F. Kane (should read W. F. de V. Kane) (BMNH); Fitton, 1976: p. 348 holotype ♀...(BMNH)).

***Spilichneumon johansoni* (Holmgren, 1871)**

DOWN: Balleevy, ♀ 11 May 1985, MRB (UM); TYRONE: Altmore Burn, ♀ 24 June 1985, MRB (UM); near Moy, ♂ 14 July 1985, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (all Boston and Nash, 1989: p. 135 as *Triptognathus*).

Ireland (Boston and Nash, 1989: p. 136 as *Triptognathus*. UM).

***Spilichneumon occisorius* (Fabricius, 1793)**

ARMAGH: Poyntzpass, July, field at hogweed *Heracleum*, WFJ (Johnson, 1922b: p. 69 var. *nigrinus* Berth.); DONEGAL: Coolmore, ♂, on the roadside among sallows *Salix*, WFJ (Johnson, 1915: p. 130); DOWN: Dromore, ♂ August 1925, WFJ (NMI); Murlough NNR, 2♂♂ 31 August 1984, BHN (UM) (det. MRB) (unpublished); Rostrevor, September 1922, WFJ (NMI) (Johnson, 1923: p. 38); Rostrevor, at Killowen, September 1925, many at flowery bank along the beach, WFJ (NMI) (both Johnson, 1927: p. 158 ♂); at Killowen beach, ♂ 29 August 1929, at wild carrot *Daucus carota*, Maureen Smyth (Johnson, 1930: p. 156).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Spilothyrateles nuptatorius* (Fabricius, 1793)**

synonym *Spilothyrateles fabricii* (Schrank, 1802)

ARMAGH: Poyntzpass, June, July and October, in stable window and on Umbelliferae in fields, WFJ (NMI) (Johnson, 1915: p. 130 as *Spilichneumon fabricii*); same locality, ♂♂♀♀ June, in stable window, WFJ (NMI) (Johnson, 1916a: p. 19 as *Spilichneumon fabricii*); DOWN: Greencastle, ♀ 16 August 1930, sandhills, ♀ 27 August 1930, shore near pier, WFJ (NMI) (Johnson, 1931c: p. 140 as *Spilichneumon fabricii*).

***Stenaoplus pictus* (Gravenhorst, 1829)** **New to Ireland**

synonym *Aoplus ratzeburgii* (Hartig, 1838)

DUBLIN: Glenasmole, ♀ 14 April 1937, AWS (NMI) (det. JFP as *Aoplus ratzeburgii*).

***Stenichneumon culpator* (Schrank, 1802)**

ARMAGH: Poyntzpass hill, {8} July {1919}, a melanic form of the male, WFJ (NMI) (det AR) (Johnson, 1920a: p. 8); Poyntzpass, {20} December {1919}, moss on pine *Pinus* stump, WFJ (NMI) (Johnson, 1920c: p. 65); DOWN: Dundrum, July 1926, WFJ (NMI) (Johnson, 1927: p. 158 ♂♀); same locality, ♂ August 1926, WFJ (NMI) (det. JFP) (Johnson, 1927: p. 158 as *Ctenichneumon sputator*; Perkins, 1953: p. 129 the specimens named *sputator* in the Johnson collection are males of *Stenichneumon culpator*); Greencastle, ♀ 24 August 1930, roadside, WFJ (Johnson, 1931c: p. 139); Rostrevor, {4} June1924, in numbers at thistles, WFJ (NMI) (Johnson, 1927: p. 158 ♂♀); same locality, ♂ 4 August 1928, WFJ (Johnson, 1929: p. 135 var. *adsentator* Tischb.); same locality, ♂♂ 6 and 7 August 1929, field opposite, WFJ (NMI) (det. JFP as *Stenichneumon culpator*) (Johnson, 1930: p. 156 as *Ctenichneumon sputator* var. *nigriventris* Berthoumieu; Perkins, 1953: p. 129 the specimens named *sputator* in the Johnson collection are males of *Stenichneumon culpator*); Warrenpoint, ♀ 6 July, WFJ (Johnson, 1929: p. 135); same locality, ♂ 17 August, WFJ (Johnson, 1929: p. 135 another var. antennae white-ringed but hind body entirely black); LOUTH: Carlingford, ♀ June 1921, WFJ (NMI) (Johnson, 1922a: p. 15 entirely black, p. 17).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Stenobarichneumon basiglyptus* (Kriechbaumer, 1890)**

synonym *Stenobarichneumon incubitor* misidentified

ANTRIM: Rea's Wood, ♂ 2-4 June 1985, Malaise, RN and MRB (UM) (det. MRB) (unpublished); ARMAGH: Poyntzpass, ♂♀ June, August and September 1916, in fields and on hill, WFJ (NMI) (Johnson, 1917a: p. 37 as *Barichneumon incubitor*; Johnson, 1921a: p. 105 as *Barichneumon incubitor*. A male with white scutellum, *teste* Dr A. Roman); DOWN: Tollymore, ♂ 21 August 1984, mixed deciduous woodland ride, RN and MRB (UM) (det. MRB) (unpublished); LOUTH: Termonfeckin, ♂ August 1924, sandhills, WFJ (NMI) (Johnson, 1927: p. 158 as *Barichneumon incubitor*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Sycaonia foersteri* (Wesmael, 1848)**

ANTRIM: Rea's Wood, ♂ 10 July 1985, swept on edge of track through deciduous woodland, MRB and RN (UM) (Boston and Nash, 1989: p. 135 as *Cratichneumon*); DOWN: Tollymore Park, ♂ 5 July 1961, AWS (NMI) (det. JFP) (unpublished as *Cratichneumon*); Quoile Wood, ♂ 11 August 1976, in undergrowth, RA (Boston and Nash, 1989: p. 135 as *Cratichneumon*).

Ireland (Boston and Nash, 1989: p. 136 as *Cratichneumon*. UM).

***Tricholabus strigatorius* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Rogerstown, 29 July 1943, AWS (NMI).

[*Triptognathus atripes* (Gravenhorst, 1829)

synonym *Amblyteles uniguttatus* Gravenhorst, 1829

MAYO: {Louisburgh} Carrowmore Lough, ♂, on reeds, CM (det. AWS as surely wrong) (Morley, 1911a: p. 9 as *Amblyteles uniguttatus*).]

***Virgichneumon digrammus* (Gravenhorst, 1820)**

synonym *Barichneumon nudicoxa* (Thomson, 1888)

ANTRIM: Killead, ♂ August 1923, WFJ (Johnson, 1927: p.158 as *Melanichneumon*); DONEGAL: Coolmore, September, on the roadside, rare, WFJ (Johnson, 1914a: p. 65

as *Melanichneumon nudicoxa*).

***Virgichneumon extremator* (Thunberg, 1824)**

synonym *Platylabus albinus* (Gravenhorst, 1829)

DONEGAL: Coolmore, September, among sallows *Salix*, not common, WFJ (Johnson, 1916a: p. 19 as *Platylabus albinus*); DOWN: Rostrevor, ♂ June 1923, WFJ (Johnson, 1927: p. 158 ♂ as *Platylabus albinus*. Var., thorax entirely black. (*exhortator* Fab. sec. Roman); same locality, ♀ 5 July 1930, in field opposite, WFJ (Johnson, 1930: p. 53 as *Platylabus albinus*. *Teste* Dr Roman).

***Virgichneumon faunus* (Gravenhorst, 1829)**

ANTRIM: Belfast, Barnett's Park, ♂ 12 August 1973, RN (det. JPB) (UM) (Boston and Nash, 1989: p. 135 as *Barichneumon*).

Ireland (Boston and Nash, 1989: p. 136 as *Barichneumon*. UM).

***Virgichneumon maculicauda* Perkins, 1953**

synonym *Barichneumon perscrutator* (Wesmael, 1844) preoccupied

LOUTH: Termonfeckin, ♂♀ July, August 1924, numerous, WFJ (NMI) (Johnson, 1927: p. 158 as *Melanichneumon perscrutator*).

***Virgichneumon monostagon* (Gravenhorst, 1820)**

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 158 as *Melanichneumon monastagon*. ♂♀); CLARE: Lahinch, ♂ 22 August 1985, on car bonnet, seafront/sandy pasture, RA (UM) (det. MRB) (unpublished); DONEGAL: Portnoo, September 1917, among sallows *Salix*, rare, WFJ (NMI) (Johnson, 1918: p. 107 as *Melanichneumon monastagon*); DOWN: Dromore, August 1925, WFJ (NMI); Dundrum, July and August 1926, WFJ; same locality, June 1926, var. *luctuosus* Gravenhorst, WFJ (all Johnson, 1927: p. 158 as *Melanichneumon monastagon*. ♂♀); Newcastle, ♂♂ 25 May, 14 June, 25 August and 6 September, WFJ (NMI) (Johnson, 1929: p.135 as *Melanichneumon monastagon* var. *luctuosus*); Rostrevor, ♂ 10 August 1929, river, WFJ (NMI) (Johnson, 1929: p. 156 as *Melanichneumon monastagon* var. *luctuosus*); Warrenpoint, ♂ 10 August, WFJ (Johnson, 1929: p.135 as *Melanichneumon monastagon* var.*luctuosus*); GALWAY: Portumna, ♂4 September

1924, RAP (NMI) (det. JFP) (unpublished); [KERRY: Kenmare, ♂ 5 July 1901, JWY (Morley, 1902: p. 54 as *Melanichneumon*)]. This record should be altered to *B. gemellus* (Johnson, 1916a: p. 18)).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Vulgichneumon bimaculatus* (Schrank, 1776)** **New to Ireland**

KERRY: Ballast, Killarney, 16 September 1930, EFB (NMI); Flesk, Killarney, June 1937, EFB (NMI); KILDARE: Rye Water, 3 June 1952, AWS (NMI) (all as *Barichneumon*).

***Vulgichneumon deceptor* (Scopoli, 1763)**

synonym *Barichneumon vestigator* (Wesmael, 1844) preoccupied

DOWN: Newcastle, ♂ 3 September {1927}, hill, on wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1929: p. 135); MAYO: Mulranny, ♂ July 1910, PEG (Morley, 1911a: p. 9 as *Barichneumon vestigator*).

***Vulgichneumon saturatorius* (Linnaeus, 1758)**

DOWN: Dromore, August 1925, WFJ (NMI); Dundrum, August 1926, WFJ (NMI) (both Johnson, 1927: p. 158 as *Melanichneumon*. ♂♀); Rostrevor, ♂ 13 July 1929, var. hind legs black, in grass plot, 7 August 1929 (NMI), field opposite, 14 August 1929, river, WFJ (Johnson, 1930: p. 156 as *Melanichneumon*); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 158 as *Melanichneumon*, ♂♀); MAYO: Westport, one (specimen) July 1911, JNH (Morley, 1911a: p. 9 as *Melanichneumon*).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Vulgichneumon suavis* (Gravenhorst, 1820)**

synonym *Barichneumon lepidus* (Gravenhorst, 1829)

ARMAGH: Newry, ♀ 1 August 1927, in street, WFJ (NMI) (Johnson, 1929: p. 135 as *Barichneumon lepidus*); Poyntzpass, June, August, in fields, on hill, WFJ (NMI) (Johnson, 1917a: p. 38 as *Barichneumon lepidus*; Johnson, 1919a: p. 34 as *Barichneumon lepidus*; Johnson, 1921a: p. 105 as *Barichneumon lepidus*; Johnson, 1922b: p. 69 as *Barichneumon lepidus*); DONEGAL: Coolmore, {24} September

{1914}, on Umbelliferae, WFJ (Johnson, 1914a: p. 65 as *Barichneumon lepidus*); DOWN: Dundrum, June 1926, WFJ; LOUTH: Termonfeckin, July, August and September 1924, WFJ (NMI) (both Johnson, 1927: p. 158 as *Barichneumon lepidus*. ♂♀); WATERFORD: Stradbally, ♂ 22-30 June 1907, HWA (Morley, 1908b: p. 276 as *Barichneumon lepidus*. A specimen with a long streak of pollen firmly affixed to each side of the face, between the scrobes and the clypeus, but not reaching the latter).

Listrodromini

***Listrodromus nycthemerus* (Gravenhorst, 1820)**

DUBLIN: Blackrock/Monkstown, emerged 16 October 2006 from the pupa of a holly blue butterfly *Celastrina argiolus britanna* Verity (Lepidoptera: Lycaenidae) collected late August/early September as a larva on ivy *Hedera*, B. Aldwell (NMI) (unpublished).

Ireland (Yu, 1998: CD-Rom).

Phaeogenini

***Aethecerus discolor* Wesmael, 1845** **New to Ireland**

KILDARE: Kilkea Park, ♀ 4 July 1937, AWS (NMI) (det. JFP).

***Aethecerus dispar* Wesmael, 1845**

DOWN: Murlough National Nature Reserve (J4039), ♂ 9 June 1973, AGI (UM) (Boston and Nash, 1989: p. 135).

Ireland (Boston and Nash, 1989: p. 136 UM).

[*Aethecerus pallicoxa* Thomson, 1891

DOWN: Rostrevor, ♂ 8 August 1929, field opposite, WFJ (Johnson, 1930: p. 156 *fide* Dr A. Roman; Perkins, 1953: p. 133 in the Johnson collection the specimen det. Roman as ?*pallicoxa* is a male of *Oiorhinus pallipalpis*); same locality, ♂ 2 July 1930, field opposite, WFJ (Johnson, 1931a: p. 53).]

***Aethecerus placidus* Wesmael, 1845** **New to Ireland**

DUBLIN: North (N.) Bull, ♀ 26 September 1941, at the roots of marram *Psamma* (now *Ammophila*), EOM (NMI) (det. JFP); WICKLOW: Broad Lough (L.), ♀ 5 June 1949, AWS (NMI) (det. JFP).

***Aethecerus rugifrons* Holmgren, 1890** **New to Ireland**

DOWN: Rostrevor, 5 August 1929, mountain, WFJ (NMI).

***Centeterus confector* (Gravenhorst, 1829)**

WEXFORD: Kilmore, towards end of August, AB (Morley, 1903: p. 281).

***Centeterus major* Wesmael, 1845**

MAYO: Clare Island, ♂♂ 1909 and 1910, JNH and CM (NMI) (Morley, 1911a: p. 10).

***Centeterus rubiginosus* (Gmelin, 1790)**

synonym *Centeterus opprimator* (Gravenhorst, 1820)

ARMAGH: Poyntzpass, ♀ 17 February 1906, in moss, February, {30} September {1921}, moss on roadside, field by sweeping, WFJ (NMI) (Johnson, 1907: p. 246 as *Centeterus opprimator*; Morley, 1907b: p. 160 as *Centeterus opprimator*; Johnson, 1920c: p. 66 as *Centeterus opprimator*; Johnson, 1922b: p. 69 as *Centeterus opprimator*); DONEGAL: Coolmore, among sallows *Salix*, WFJ (Johnson, 1915: p. 131 as *Centeterus opprimator*); DOWN: Rostrevor, ♂♀ 27 July 1929, mill, WFJ (Johnson, 1930: p. 156 as *Centeterus opprimator*. *Fide* Dr A. Roman); Rostrevor, ♂ 19 July 1975, oak *Quercus* woodland, RN (UM) (det. MRB); FERMANAGH: Legalough, ♂ 2 July 1985, MRB and RN (UM) (det. MRB); TYRONE: Moy, ♀ 17 August 1984, MRB (UM) (all unpublished).

Ireland (Boston and Nash, 1989: p. 136 as *Centeterus opprimator*. UM).

[*Colpognathus armatus* Thomson, 1891

(Morley, 1903: p. 293 not satisfied).]

***Colpognathus celerator* (Gravenhorst, 1807)**

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256); Poyntzpass, August, in fields at angelica *Angelica*, WFJ (NMI) (Johnson, 1914a: p. 65); same locality, July, in stable and at flowers of hogweed *Heracleum*, WFJ (NMI) (Johnson, 1916a: p. 19); DONEGAL: Coolmore, {16 September 1915}, at flowers of wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1915: p. 131); DOWN: Rostrevor, September and October 1925, WFJ (NMI) (Johnson, 1927: p. 158 ♀); same locality, ♂3 August, WFJ

(Johnson, 1929: p. 136); DUBLIN: Portmarnock, ♀ 3 September 1942, AWS (NMI) (det. JFP) (unpublished); KERRY: Kenmare, ♀ 7 July 1901, JWY (Morley, 1902: p. 54); KILDARE: Rye water, ♀ 16 August 1942, AWS (NMI) (det. JFP) (unpublished); LOUTH: Termonfeckin, August 1924, WFJ (NMI) (Johnson, 1927: p. 158 ♀); MAYO: Belclare, ♀ July 1910, JNH (NMI) (Morley, 1911a: p. 10).

***Colpognathus divisus* Thomson, 1891**

ARMAGH: Poyntzpass, ♀ 2 February 1910 {2 August 1915}, in moss on roadside under pine *Pinus*, WFJ (NMI) (Johnson, 1912a: p. 78; Johnson, 1920c: p. 66); DONEGAL: Coolmore, September 1916, among sallows *Salix*, WFJ (NMI) (Johnson, 1917a: p. 38); DOWN: Rostrevor, July 1922, in window, WFJ (NMI) (Johnson, 1923: p. 38); MAYO: Achill, ♂, WFJ; Clare Island, several ♂♂, CM (NMI); same locality, 700ft, ♀ {June 1911}, WFJ (NMI) (Morley, 1911a: p. 10); WICKLOW: west of Knickeen, ♂ 21 July 1940, AWS (NMI) (det. JFP) (unpublished).

***Diadromus subtilicornis* (Gravenhorst, 1829)** **New to Ireland**

ARMAGH: Poyntzpass, 19 August 1920, WFJ (NMI).

***Diadromus troglodytes* (Gravenhorst, 1829)**

DOWN: Tollymore (J3233), 2♂♂ 21 August 1984, MRB (UM) (Boston and Nash, 1989: p. 135); KILDARE: Kilkea Park, ♀ 4 July 1937, AWS (NMI) (det. JFP); WICKLOW: Kilmacrea Park, ♀ 25 September 1938, AWS (NMI) (det. JFP) (both unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Diadromus varicolor* Wesmael, 1845**

DOWN: Dromore, ♂♂ August 1925, WFJ (NMI) (Johnson, 1927: p. 158); Rostrevor, ♂♂ 7 and 19 August 1929, field opposite, WFJ (NMI) (Johnson, 1930: p. 156).

***Dicaelotus cameroni* Bridgman, 1881**

ARMAGH: Poyntpass, ♀ {23} May {1914}, in a field, WFJ (NMI) (Johnson, 1915: p. 131 a female form with the abdomen mainly red); KERRY: Rossbeigh, 2♀♀ June 1902, HD (Morley, 1903: p. 275 both have the abdomen mainly red).

***Dicaelotus erythrostoma*Wesmael, 1845**

GALWAY: Bencorr, ♀ 3 July 1946, 2000ft, R. A. Lever (BMNH) (Perkins, 1953: p. 144).

***Dicaelotus inflexus* Thomson, 1891**

Ireland (Perkins, 1953: p. 144 1♀ (Stelfox Coll)).

***Dicaelotus orbitalis* Thomson, 1891**

KILDARE: Rye Water, ♀ 8 July 1945, AWS (Perkins, 1953: p. 143).

***Dicaelotus pumilus* (Gravenhorst, 1829)**

synonym *Dicaelotus morosus* Wesmael, 1855

ARMAGH: Poyntzpass, July, in stable window, WFJ; same locality, December and January, moss in wood, WFJ (NMI) (Johnson, 1920c: p. 66); same locality, Demoan Wood, January, from moss, WFJ (NMI) (Johnson, 1922b: p. 69); DONEGAL: Coolmore, on the sandhills at thistles and on the roadside among sallows *Salix*, WFJ (NMI) (Johnson, 1915: p. 131); Portnoo, {6} July {1920}, sandhills, WFJ (Johnson, 1921a: p. 105); DOWN: Rostrevor, ♂ 18 {8} July {1927}, WFJ (NMI) (Johnson, 1929: p. 136); DUBLIN: Glenasmole, ♀ 6 August 1952, AWS (NMI) (det. JFP); Lucan, ♂ 22 June 1943, AWS (NMI) (det. JFP); KILDARE: Royal (R.) Canal, ♀ 15 August 1943, AWS (NMI) (det. JFP); KILKENNY: Kilkenny, ♀ 30 April 1936, AWS (NMI); LAOIS: Athy District (dt), ♂ 4 July 1937, AWS (NMI); LEITRIM: no locality (BMNH) (Perkins, 1953: p. 144 as *Dicaelotus morosus* 27♀ (this total evidently includes an English locality)); SLIGO: Trawalua, ♀ 8 July1936, AWS (NMI) (det. JFP as *Dicaelotus morosus*) (unpublished); WICKLOW: Baltinglass, ♂ 30 June 1937, AWS (NMI) (all unpublished).

***Dicaelotus punctiventris* (Thomson, 1891)**

ANTRIM: Rea's Wood, ♀ 2-4 June 1985, Malaise trap, MRB and RN (UM); TYRONE: Moy, 2♀♀ 27 May-2 June 1985, Malaise trap, MRB (UM) (both Boston and Nash, 1989: pp 135-136).

Ireland (Boston and Nash, 1989: p. 136 UM).

[*Dicaelotus resplendens* Holmgren, 1890

synonym *Dicaelotus fitchi* Perkins, 1953

DUBLIN: The Slade of Saggart, 2♀♀ 8 July 1936, AWS (Perkins, 1953: p. 160 as ?*Dicaelotus fitchi* I have also examined...females which may represent a distinct species, differing from the darkest of the above in having the tibiae fuscous, ivory basally. I have, however been unable to discover any other reliable differences). There is a Stelfox specimen from the above locality dated 10 November 1935 in NMI.]

***Dicaelotus ruficoxatus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {11} July {1914}, in stable, in stable window, WFJ (Johnson, 1915: p. 131; Johnson, 1916a: p. 19); DUBLIN: Gollierstown (Gollierst'n), ♀ 6 November 1949, AWS (NMI); WICKLOW: Clara, ♀ 4 September 1938, AWS (NMI) (det. JFP) (both unpublished).

***Dicaelotus rufilimbatus* (Gravenhorst, 1820)**

ARMAGH: Poyntzpass, 9 March 1910, scarce, WFJ (NMI) (Johnson, 1912a: p. 78); same locality, January, February and March, in moss from a wood, on roadside, WFJ (NMI) (Johnson, 1916a: p. 19; Johnson, 1920c: p. 66); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17); MAYO: {Louisburg} Carrowmore Hill, several July, CM (NMI); Carrowmore Lough, several July, on reeds etc., CM; Clare Island, several July 1910, CM (NMI); Curraun, sandhills, WFJ; Darby's Point, September {June}, WFJ (NMI); Mulranny, PEG (Morley, 1911a: p. 10).

***Dicaelotus rufoniger* Berthoumieu, 1897**

KILDARE: no locality; SLIGO: no locality; WEXFORD: no locality; WICKLOW: no locality {Lough Ouler}, ♀ 22 August 1937, AWS (NMI) (det. JFP) (all AWS) (all Perkins, 1953: p. 144 I have also examined 3♂ and 20♀ in the A. W. Stelfox Coll.).

***Dirophanes callopus* (Wesmael, 1845)**

synonym *Phaeogenes tibiator* (Thunberg, 1824)

ARMAGH: Poyntzpass, {19} July {1918}, in house, WFJ (NMI) (Johnson, 1919a: p. 35 as *Phaeogenes*); KILDARE: Royal (R.) Canal, ♀ 15 August 1943, AWS (NMI) (det. JFP as *Phaeogenes tibiator*).

***Dirophanes fulvitarsis* (Wesmael, 1845)**

synonym *Dirophanes ruficoxa* (Thomson, 1891)

ARMAGH: Poyntzpass, January and August, field and in moss, WFJ (NMI) (Johnson, 193: p. 139 as *Phaeogenes*; Johnson, 1921a: p. 105 as *Phaeogenes*); DONEGAL: Coolmore, {18} September {1914}, on roadside among sallows *Salix*, WFJ (NMI) (conf. JFP) (Johnson, 1916a: p. 19; Perkins, 1953: p. 134 specimens so named (as *Phaeogenes coryphaeus*) in Johnson's collection are *Ph. fulvitarsis* Wesmael *nec.* auctt. (syn. *ruficoxa* Thomson)); DOWN: Newcastle, ♂ 17 September, WFJ (Johnson, 1929: p. 135 as *Phaeogenes ruficoxa*); DUBLIN: Glenasmole, ♀ 25 June 1941, AWS (NMI) (det. JFP as *Dirophanes ruficoxa*).

***Dirophanes invisor* (Thunberg, 1824)** **Confirmed as Irish**

synonym *Phaeogenes stimulator* (Gravenhorst, 1829)

KILDARE: south of Naas, 14 May 1934, AWS (NMI); [MAYO: Brackloon Wood, near Westport, 10♂♂ 4 August 1911, PEG (Morley, 1911a: pp 9-10 as *Phaeogenes stimulator*. Probably referrable to this species)].

***Dirophanes maculicornis* (Stephens, 1835)** **New to Ireland**

DUBLIN: Glenasmole, 24 April 1938, AWS (NMI); WICKLOW: Clara, 23 April 1933, AWS (NMI); Manor Kilbride, 27 May 1953, AWS (NMI).

***Dirophanes regenerator* (Fabricius, 1804)**

synonym *Dirophanes rusticatus* (Wesmael, 1845)

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p.158 as *Phaeogenes rusticatus*); ARMAGH: Armagh, WFJ (Johnson, 1907: p. 246 as *Phaeogenes rusticatus*); Poyntzpass, August, in fields, WFJ (Morley, 1907b: p. 160 as *Phaeogenes rusticatus*. ♀; Johnson, 1912a: p. 77 as *Phaeogenes rusticatus*; Johnson, 1917a: p. 38 as *Phaeogenes rusticatus*); same locality, January, moss in wood, WFJ (Johnson, 1920c: p. 66 as *Phaeogenes rusticatus*); DONEGAL: Coolmore, among sallows *Salix* on the roadside, WFJ (Johnson, 1915: p. 131 as *Phaeogenes rusticatus*); Portnoo, September 1917, among sallows *Salix*, cliff, WFJ (Johnson, 1918: p. 108 as *Phaeogenes rusticatus*; Johnson, 1919a: p. 35 as *Phaeogenes rusticatus*); DOWN: Greencastle, ♂ 9 August 1930, on shore towards Mill Bay, WFJ (NMI) (Johnson, 1931c: p. 140 as *Phaeogenes rusticatus*).

***Epitomus infuscatus* (Gravenhorst, 1829)**

synonym *Epitomus parvus* Thomson, 1891

DUBLIN: Glenasmole, ♀ 7 October 1936 and ♀ 14 August 1941, AWS (NMI) (det. JFP as *Epitomus parvus*); St Anne's, Clontarf, ♀ 17 April 1936, EOM (NMI) (det. JFP as *Epitomus parvus*) (all unpublished).

Ireland (Perkins, 1953: p. 161 as *Epitomus parvus*).

***Epitomus proximus* Perkins, 1953**

DUBLIN: Lucan, ♀ 22 June 1945, AWS (NMI) (det. JFP); Slade Brook, ♀ 21 June 1944, AWS (NMI) (det. JFP); St Anne's, Clontarf, ♀ 12 March 1939, EOM (NMI) (det. JFP) (all unpublished); KILDARE: no locality, ♂ (allotype) 29 August 1937, AWS (BMNH) (Perkins, 1953: p. 162).

Ireland (Perkins, 1953: p. 161 paratypes).

***Eriplatys ardeicollis* (Wesmael, 1845)**

Ireland (Broad, 2006).

***Hemichneumon subdolus* (Wesmael, 1857)**

synonym *Hemichneumon elongatus* (Ratzeburg, 1852)

ARMAGH: Poyntzpass, July and August, at angelica *Angelica*, in fields, on roadside, rare, WFJ (NMI) (Johnson, 1914a: p. 65; Johnson, 1917a: p. 38); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 139).

***Herpestomus arridens* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Harold's Cross, ♂ 24 August 1941, AWS (NMI) (det. JFP).

***Herpestomus brunnicornis* (Gravenhorst, 1829)**

ANTRIM: Antrim (town), Ballyharvey Road, ♂♂♀♀ July 1985, ex pupa of the orchard ermine *Yponomeuta padella* (L.) (Lepidoptera: Yponomeutidae), SC (UM) (det. MRB); Lisburn (Moira Road), ♂ July 1985, ex pupa of *Yponomeuta padella*, SC (UM) (det. MRB); Greenmount, ♀ July 1985, ex pupa of *Yponomeuta padella*, SC (UM) (det. MRB); Rea's Wood, ♀ 25 September 1984, MRB and RN (UM) (all unpublished); ARMAGH: Poyntzpass, {25} August {1920}, field, WFJ (NMI) (Johnson, 1921a: p. 105); DONEGAL: Coolmore, {11} September {1913}, on

sandhills at Umbelliferae, WFJ (NMI) (Johnson, 1914a: p. 65); Portnoo, {10} September {1918}, cliff, WFJ (NMI) (Johnson, 1919a: p. 35); DOWN: Dromore, ♂ August 1925, WFJ (NMI) (Johnson, 1927: p. 158); Newcastle, ♂ 17 September, WFJ (Johnson, 1929: p. 135); DUBLIN: near Foxrock, ♀ July 1942, ex *Hyponomeuta* (Lepidoptera) on hawthorn *Crataegus*, (NMI) (det. JFP) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Herpestomus nasutus* Wesmael, 1845** **New to Ireland**

DUBLIN: Saggart, ♀ 29 September 1935, AWS (NMI) (det. JFP).

***Herpestomus wesmaeli* Perkins, 1953**

KILDARE: no locality, ♀ (paratype), AWS (Perkins, 1953: p. 158).

***Heterischnus nigricollis* (Wesmael, 1845)** **New to Ireland**

DUBLIN: Gollierstown (Gollierst'n), ♀ 11 September 1946 and ♂ 4 August 1948, AWS (NMI) (det. JFP); TIPPERARY: Ballinacourty (B'c't'y), ♀ 19 September 1945, AWS (NMI) (det. JFP).

***Mevesia arguta* (Wesmael, 1845)**

ARMAGH: Poyntzpass, ♂♂ {22 and 28} July {1914 and 1917}, in stable window, in fields, WFJ (NMI) (Johnson, 1915: p. 130 as *Phaeogenes*; Johnson, 1918: p. 107 as *Phaeogenes*).

***Misetus oculatus* Wesmael, 1845** **New to Ireland**

DONEGAL: Ards, 14 June 1960, AWS (NMI).

***Nematomicrus tenellus* Wesmael, 1845**

DOWN: Bangor-Stricklands Glen, ♂♂ July 1969, open woodland, CR (UM) (det. JPB *fide* MRB); DUBLIN: St Anne's, Clontarf, ♀ 5 June 1937, EOM (NMI) (det. JFP) (both unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Oiorhinus pallipalpis* Wesmael, 1845**

ANTRIM: Belfast (Toughmonagh), ♀ 25 May 1985, herbaceous layer along path, MRB (UM) (unpublished); DOWN: Rostrevor, ♂♂ 11, 14 and 25 July, WFJ (NMI) (conf. JFP) (Johnson, 1929: p. 136); same locality, ♂ 8 August 1929, field opposite,

WFJ (Johnson, 1930: p. 156 as *fide* Dr A. Roman; Perkins, 1953: p. 133 in the Johnson collection the specimen det. Roman as ?*pallicoxa* (*Aethecerus*) is a male of *Oiorhinus pallipalpis*); TIPPERARY: Aherlow, ♂ 28 September 1943, AWS (NMI); TYRONE: Moy, ♀ 24 October 1982, MRB (UM); Moy, ♀ 24 March (*sic*) 1983, MRB (UM) (all unpublished).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Oronotus binotatus* (Gravenhorst, 1829)** **New to Ireland**

DUBLIN: Slade of Saggart, ♀ 22 August 1935, JFP (BMNH); KILDARE: Arthurstown (Arthurst'n), 10 August 1952, AWS (NMI); Kilkea Park (Pk), 10 September 1940, AWS (NMI); WICKLOW: Glending, 16 September 1953, AWS (NMI); Kippure House (Ho), 26 September 1948, AWS (NMI).

***Phaeogenes coryphaeus* Wesmael, 1845**

[DONEGAL: Coolmore, September, on roadside among sallows *Salix*, WFJ (Johnson, 1916a: p. 19; Perkins, 1953: p. 134 specimens so named in Johnson's collection are *Ph. fulvitarsis* Wesmael *nec*. auctt. (syn. *ruficoxa* Thomson))]; MAYO: Louisburgh, ♀ July 1910, JNH (Morley, 1911a: p. 10).

***Phaeogenes curator* (Thunberg, 1824)** **New to Ireland**

synonym *Phaeogenes crassidens* Thomson, 1891

ARMAGH: Poyntzpass, ♀ 15 August 1918, WFJ (NMI) (det. JFP as *Phaeogenes crassidens*); KILDARE: Oldtown House (Ho.), ♀ 10 August 1952, AWS (NMI) (det. AWS as *Phaeogenes crassidens*).

***Phaeogenes foveolatus* Perkins, 1953**

DUBLIN: Slade of Saggart, ♀ (paratype) 4 October 1936, AWS; WICKLOW: Dunran, ♀ (paratype) 25 May 1937, AWS (Perkins, 1953: p. 167).

***Phaeogenes heterogonus* Holmgren, 1890**

ARMAGH: Poyntzpass, July, at hogweed *Heracleum*, in house, WFJ (Johnson, 1915: p. 130; Johnson, 1919a: p. 35); same locality, July, on hill, on the wing, and in field at ragweed *Senecio*, WFJ (Johnson, 1916a: p. 19).

***Phaeogenes melanogonos* (Gmelin, 1790)**

ARMAGH: Poyntzpass, {9} August {1915}, in fields, WFJ (NMI) (Johnson, 1917a: p. 38; Johnson, 1922b: p. 69); Newcastle, ♂ 25 August {1927}, WFJ (NMI) (Johnson, 1929: p. 135).

***Phaeogenes planifrons* Wesmael, 1845**

ARMAGH: Poyntzpass, 2♀♀, one in moss on 8 March 1906, WFJ (NMI) (Johnson, 1907: p. 246; Johnson, 1912a: p. 77); same locality, {21} June 1916, in fields, WFJ (NMI) (Johnson, 1917a: p. 38); DONEGAL: Portnoo, {18} September {1918}, cliff, WFJ (NMI) (Johnson, 1919a: p. 35); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (NMI) (det. AWS) (Speight and Healy, 1977: p. 153); KILDARE: Royal (R.) Canal, ♀ 6 August 1944, AWS (NMI) (det. JFP) (unpublished); MONAGHAN: Scotstown, ♀ 15 March 1894, in moss, WFJ (NMI) (Johnson, 1904a: p. 256; Johnson, 1904b: p. 262; Johnson, 1920c: p. 66).

***Phaeogenes planipectus* Holmgren, 1890**

DOWN: Dromore, ♂ August 1925, WFJ (NMI) (Johnson, 1927: p. 158).

******Stenodontus marginellus* (Gravenhorst, 1829)** **New to Ireland**

DONEGAL: Finner, 11 August 1938, AWS (NMI); DUBLIN: Lynch Park, 4 September 1953, AWS (NMI); KILDARE: Royal (R.) Canal, 12 July 1944, AWS (NMI).

******Tycherus bellicornis* Wesmael, 1845** **New to Ireland**

KILDARE: Royal (R.) canal, f 30 April 1944, AWS (NMI) (det. JFP as *Phaeogenes*).

***Tycherus cephalotes* (Wesmael, 1845)**

ARMAGH: Poyntzpass hill, July, rare, WFJ (Johnson, 1914a: p. 65 as *Phaeogenes*).

******Tycherus elongatus* (Thomson, 1891)** **New to Ireland**

TIPPERARY: Greenfield House (Ho), 21 July 1944, bred from the larva of *phragmatella* [sic], BPB (NMI).

******Tycherus flavidens* (Wesmael, 1845)** **New to Ireland**

DUBLIN: Harold's Cross, ♂ 7 August 1934, AWS (NMI) (det. JFP as *Phaeogenes*).

***Tycherus fuscicornis* (Wesmael, 1845)**

ANTRIM: Killead, ♂ August 1923, WFJ (Johnson, 1927: p. 158 as *Phaeogenes*. *Teste*

Roman); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (NMI) (det. AWS) (Speight and Healy, 1977: p. 153 as *Phaeogenes*); KILDARE: Royal (R.) Canal, ♀ 15 August 1943, AWS (NMI) (det. JFP as *Phaeogenes*) (unpublished).

***Tycherus impiger* (Wesmael, 1845)**

DOWN: Dromore, ♀ August 1925, WFJ (NMI) (Johnson, 1927: p. 158 as *Phaeogenes*); MAYO: {Achill Sound}, Sraheens Lough, ♀ June 1910, WFJ (NMI) (Morley, 1911a: p. 9 as *Phaeogenes*).

***Tycherus infimus* (Wesmael, 1845)**

LOUTH: Edentubber, ♀ 5 April 1906, moss, WFJ (Johnson, 1907: p. 246 as *Phaeogenes*; Morley, 1907b: p. 160 as *Phaeogenes*; Johnson, 1920c: p. 66 as *Phaeogenes*).

***Tycherus ischiomelinus* (Gravenhorst, 1829)**

DOWN: Newcastle, 27 August {1927}, WFJ (NMI) (Johnson, 1929: p. 135 as *Phaeogenes*).

***Tycherus macilentus* (Wesmael, 1845)**

synonym *Micrope macilenta* (Wesmael, 1845)

KILDARE: Skerries Bog, ♀ 23 September 1948, AWS (NMI) (Perkins, 1953: p. 144 as *Micrope macilenta*).

[*Tycherus nigridens* (Wesmael, 1845)

DOWN: Newcastle, ♂ 27 August, WFJ (Johnson, 1929: p. 135 as *Phaeogenes*; Perkins, 1953: p. 133 the Johnson specimen is a male of *Ph. ophthalmicus*).]

***Tycherus ophthalmicus* (Wesmael, 1845)**

ARMAGH: Poyntzpass, August, field, WFJ (Johnson, 1921a: p. 105 as *Phaeogenes*); DONEGAL: Coolmore, among sallows *Salix*, WFJ (NMI) (Johnson, 1915: p. 130 as *Phaeogenes*); same locality, September, at flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1916a: p. 19 as *Phaeogenes*. One of these specimens, a female, varies from the type in the following points - the incisures of the apical segments of the abdomen are pale and the two anterior pairs of legs have the femora, tibiae, and tarsi entirely red); Portnoo, {3} September 1917, on sandhills, cliff, WFJ (NMI) (Johnson, 1918: p.

108 as *Phaeogenes*; Johnson, 1919a: p. 35 as *Phaeogenes*); DOWN: Newcastle, ♂ 27 August {1927}, WFJ (NMI) (Johnson, 1929: p. 135 as *Phaeogenes nigridens*; Perkins, 1953: p. 133 the Johnson specimen is a male of *Ph. ophthalmicus*); MAYO: Brackloon Wood, Westport, ♂, PEG (Morley, 1911a: p. 9 as *Phaeogenes*).

Ireland (Boston and Nash, 1989: p. 136 as *Phaeogenes*. UM).

***Tycherus osculator* (Thunberg, 1824)**

LOUTH: Edentubber, ♀ 5 April 1906, WFJ (NMI) (det. JFP as *Phaeogenes*) (unpublished); TYRONE: Moy, ♀ 9-19 March 1983, on laurel *Prunus laurocerasus*, MRB (UM) (Boston and Nash, 1989: p. 135 as *Phaeogenes*).

Ireland (Boston and Nash, 1989: p. 136 as *Phaeogenes*. UM).

***Tycherus stipator* (Wesmael, 1855)**

ARMAGH: Poyntzpass, {16} September {1921}, in fields, WFJ (NMI) (Johnson, 1922b: p. 69 as *Phaeogenes*); KILDARE: Rye Water, ♀ 23 April 1944, AWS (NMI) (det. JFP as *Phaeogenes*); WICKLOW: Arklow District, ♀ 4 June 1926, AWS (NMI) (det. JFP as *Phaeogenes*) (both unpublished).

Ireland (Boston and Nash, 1989: p. 136 as *Phaeogenes*. UM).

***Tycherus suspicax* (Wesmael, 1845)**

ARMAGH: Poyntzpass, January, in moss, WFJ (Johnson, 1913: p. 139 as *Phaeogenes*).

Ireland (Boston and Nash, 1989: p. 136 as *Phaeogenes*. UM).

Platylabini

***Apaeleticus bellicosus* Wesmael, 1845** **New to Ireland**

DOWN: Ballyroney, 10 August 1956, AWS (NMI).

***Cyclolabus nigricollis* (Wesmael, 1845)**

KERRY: Caragh Lake, ♀ 2 July 1901, JWY (Morley, 1902: p. 54 as *Platylabus*; Morley, 1903: p. 233 as *Platylabus* [about middle of August]); WICKLOW: Hollywood, ♀ 26 September 1951, AWS (NMI) (unpublished).

***Cyclolabus pactor* (Wesmael, 1845)**

Ireland (Broad, 2006).

***Ectopius rubellus* (Gmelin, 1790)**

DONEGAL: Coolmore, on the roadside among sallows *Salix*, WFJ (NMI) (Johnson, 1915: p. 130 as *Platylabus*).

***Linycus exhortator* (Fabricius, 1787)**

synonym *Platylabus dimidiatus* (Gravenhorst, 1829)

DONEGAL: Portnoo, September, cliff, WFJ (NMI) (Johnson, 1919a: p. 35 as *Platylabus dimidiatus*); DOWN: Greenhill, ♂♀ August 1930, common on roadside, WFJ (Johnson, 1931c: p. 140 as *Platylabus dimidiatus*); Rostrevor, June 1923, {26 June 1925}, WFJ (NMI) (Johnson, 1927: p. 158 as *Platylabus dimidiatus*); KERRY: Caragh Lake, ♀ 14 August 1901, JWY (Morley, 1902: p. 54 as *Platylabus dimidiatus*); Kenmare, early in July (Morley, 1903: p. 234 as *Platylabus dimidiatus*); Muckross, ♀ June 1905, JNH (Morley, 1911c: p. 20 as *Platylabus dimidiatus*; Anon., 1913: p. 43 as *Platylabus dimidiatus*); WEXFORD: Kilmore (Morley, 1903: p. 234 as *Platylabus dimidiatus*).

***Platylabus curtorius* (Thunberg, 1824)**

synonym *Platylabus pedatorius* (Fabricius, 1793) misidentification

ARMAGH: Poyntzpass, ♂♂ July, in fields, WFJ (NMI) (Johnson, 1918: p. 107 as *Platylabus pedatorius*); same locality, ♀♀ May, in garden at hedge parsley *Torilis*, WFJ (Johnson, 1921a: p. 105 as *Platylabus pedatorius*); same locality, ♂♂ June, in field, ♀ August, in garden, WFJ (Johnson, 1921a: p. 105 as *Platylabus pedatorius* var. *iridipennis* Gravenhorst); Poyntzpass hill, ♂♂♀♀ May, WFJ (NMI) (Johnson, 1920a: p. 8 as *Platylabus pedatorius*); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 139 as *Platylabus pedatorius*); same locality, September, among the sallows *Salix*, WFJ (Johnson, 1916a: p. 19 as *Platylabus pedatorius*); Creeslough, ♀ 20 July 1977, hedgerow, RN (UM) (unpublished); Portnoo shore, June, WFJ (NMI) (Johnson, 1920a: p. 8 as *Platylabus pedatorius*); MAYO: Sraheens Lough, Achill, ♀ June, WFJ (NMI) (Morley, 1911a: p. 9 as *Platylabus pedatorius*); TYRONE: Moy, 2♀♀ 24 July- 4 August 1985, Malaise trap in a rural garden, MRB (NMI and UM) (unpublished).

Ireland (Boston and Nash, 1989: p. 136 as *Platylabus pedatorius*. UM).

***Platylabus decipiens* Wesmael, 1848**

MAYO: Achill Sound, ♀ June 1911, WFJ (Morley, 1911a: p. 9).

***Platylabus dolorosus* (Gravenhorst, 1829)** **New to Ireland**

KILDARE: Kilteel, 15 September 1946, AWS (NMI); WICKLOW: Drumgoff Brook (Bk), 20 October 1942, AWS (NMI).

***Platylabus iridipennis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, ♀ 22 August 1920, WFJ (NMI) (det. AR); DOWN: Dundrum, ♂ August 1925, WFJ (Johnson, 1927: p. 158); Newcastle, ♂ 11 June, WFJ (Johnson, 1929: p. 135); TYRONE: Moy, ♀ 19-25 August 1985, Malaise trap, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB).

Ireland (Boston and Nash, 1989: p. 136 UM).

***Platylabus opaculus* Thomson, 1888**

CAVAN: Farnham, 2♂♂6♀♀ 29 June 1935, RCF (Farris) (BMNH) (Perkins, 1953: p. 142); DUBLIN: Jobstown, ♀ 8 September 1949, AWS (NMI) (det. JFP) (unpublished).

***Platylabus pumilio* Holmgren, 1871**

MAYO: Achill, ♂ June 1909, JNH (Morley, 1911a: p. 9).

***Platylabus rufus* Wesmael, 1845**

ARMAGH: Acton Glebe, Poyntzpass, ♀, WFJ (det. CM) (NMI) (Johnson, 1904a: p. 256; Johnson, 1904b: p. 262).

***Platylabus vibratorius* (Thunberg, 1824)**

synonym *Platylabus orbitalis* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, August 1916, in fields, WFJ (Johnson, 1917a: p. 38 as *Platylabus orbitalis*. A male var. with the hind tarsi white); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 139 as *Platylabus orbitalis*); same locality, ♀ September 1916, among herbage on the roadside, WFJ (Johnson, 1917a: p. 38 as *Platylabus orbitalis*, of the var. *subalbellus* Grav.); Portnoo shore, June, WFJ (Johnson, 1920a: p. 8 as *Platylabus orbitalis*); same locality, September, cliff, WFJ

(Johnson, 1919a: p. 35 as *Platylabus orbitalis*); DOWN: Rostrevor, Victoria Square, ♂ 6 September 1929, var., WFJ (Johnson, 1930: p. 156 as *Platylabus orbitalis*); DUBLIN: Howth, ♀, D. Westropp (NMI) (det. CM) (unpublished); Royal Canal, ♀ 15 August 1943, AWS (NMI) (det. AWS); Slade Brook (Brk), ♀ 21 September 1941, AWS (NMI) (det. AWS) (both unpublished); MAYO: Clare Island, one specimen July {1910}, CM (NMI) (Morley, 1911a: p. 14 as *Casinaria orbitalis*).

***Pristicerops infractorius* (Linnaeus, 1761)**

synonym *Ichneumon phaleratus* (Haliday, 1839)

Ireland (Haliday, 1839: p. 112 as *Ichneumon phaleratus*. On a willow *Salix*, September; Morley, 1903: p. 226 as *Platylabus phaleratus*; Fitton, 1976: p. 334 as *Ichneumon*. Syntypes ♂♀...lost).

[*Cryptus obscurus* Gravenhorst =?*Hellwigia obscura* Gravenhorst, 1823

ANTRIM: Cave Hill, ♂, HLO (Johnson, 1912a: p. 78).]

LYCORININAE

This subfamily comprises only about 30 species. All are now placed in a single genus, *Lycorina*, world-wide in distribution. There is one species in Europe. The pattern of grooves on the metasomal tergites is very characteristic, although the beginner might be confused by other ichneumonids, such as Glyptini (Banchinae) and some pimplines, which have strong diagonal grooves on the tergites. The recorded hosts of *Lycorina* species are Lepidoptera of the families Gelechiidae, Pyralidae and Tortricidae. Most of the hosts seem to be species with larvae which construct leaf rolls or similar shelters. The cocoon is cylindrical with rounded ends, transparent, and very thin and soft. The exit hole is at the end.

***Lycorina triangulifera* Holmgren, 1859** **New to Ireland**

WICKLOW: Deputy's Pass, 19 July 1929, AWS (NMI).

MESOCHORINAE

This is a moderately large subfamily with relatively few genera, but more than 650

described species. Taxonomically the group is poorly known and there are large numbers of species, especially of *Mesochorus*, awaiting proper discrimination and description. About 50 species, representing four genera, comprise the 'British list'.

As information accumulates it seems more certain that, with the possible exception of one genus, all species of Mesochorinae are obligatory, endophagous hyperparasites. The hosts of mesochorines are larvae of other Ichneumonidae and Braconidae (Hymenoptera) or, less frequently, Tachinidae (Diptera) attacking a range of primary hosts, but mainly Lepidoptera. Other primary hosts include Hemiptera, and apart from the relatively small number of ichneumonids attacking spiders and pseudoscorpions, these are the only ichneumonids associated, albeit indirectly, with hosts other than immature stages of holometabolous insects. The primary parasites attacked by mesochorines are almost aways endophagous, but they have been reared from ectoparasites, such as *Phytodietus* (Tryphoninae).

The female mesochorine inserts her fine ovipositor into the haemocoel of the primary host and uses it to locate primary parasite larvae, into which she oviposits. The mesochorine larva develops internally. Many mesochorines attack gregarious endoparasites and often several individual larvae within a host will be parasitized. Mesochorines are koinobionts and the adults emerge from the cocoons or puparia of their primary parasite hosts.

***Astiphromma longiceps* (Strobl, 1904)**

DUBLIN: Glenasmole, ♀ 21 September 1949, AWS (NMI) (det. JFP); Lucan, Sarsfield Estate, ♀ 27 September 1948, AWS, det. JFP (Stelfox, 1954: p. 159 as *Dolichochorus*).

***Astiphromma sericans* (Curtis, 1833)**

ANTRIM: ?near Belfast, paralectotype ♂ lectotype ♀ (NMI) (Curtis, 1833: 464 as *Mesochorus*; Fitton, 1976: p. 323 as *Mesochorus*; Horstmann, 2006: pp 1451-1452).

****Astiphromma splenium* (Curtis, 1833)** **New to Ireland**

synonym *Astiphromma strenuum* (Holmgren, 1860)

Down: Drinnahilly, 23 August 1964, AWS (as *strenuum*) (NMI); Tollymore Park, 9

June 1962, AWS (NMI) (as *strenuum*); LAOIS: Emo, 15 May 1949, AWS (NMI) (as *strenuum*); WICKLOW: Woodend, 17 May 1954, AWS (NMI) (as *strenuum*).

[*Cidaphus atricillus* (Haliday, 1839)

DOWN: Holywood, August, September, AHH (Haliday, 1839: p. 114 as *Cryptus*; Fitton, 1976: p. 333 as *Cryptus*. Syntypes ♂♀...lost). Identity ?*Cidaphus atricilla*).

Ireland (Broad, 2006).]

***Mesochorus anomalus* Holmgren, 1860**

ARMAGH: Poyntzpass, May, WFJ (NMI) (Johnson, 1916a: p. 20 as *Picrostigeus*); same locality, {25} July {1921}, window, WFJ (NMI) (Johnson, 1922b: p. 69); DOWN: Newcastle, ♂ 9 May, WFJ (Johnson, 1929: p. 136 as *Picrostigeus*).

Ireland (Morley, 1911b: p. 64 as *Picrostigeus*. Common in Ireland (Haliday MS. in Dublin Museum)).

***Mesochorus arenarius* (Haliday, 1839)**

DUBLIN: Portmarnock, paralectotype ♂ lectotype ♀ June, on creeping willow *Salix argentea* (now *Salix repens* var *argenta*), AHH (NMI) (Haliday, 1839: p. 115 as *Cryptus*; Halbert, 1908: p. 152; Fitton, 1976: pp 332-333 as *Cryptus*; Horstmann, 2006: p. 1454 as *Cryptus*).

***Mesochorus atriventris* Cresson, 1872**

synonym *Mesochorus sylvarum* Haliday, 1839 preoccupied

Ireland (Haliday, 1839: p. 114 as *Cryptus sylvarum*. In woods, June-August; Morley, 1915: p. 327; Fitton, 1976: p. 334 as *Cryptus sylvarum*. Lectotype ♀ paralectotype ♀...(NMI)...one female on a green-headed pin; Horstmann, 2006: pp 1454 and1456).

***Mesochorus bracatus* Schwenke, 1999**

Ireland (Broad, 2006).

***Mesochorus brevipetiolatus* Ratzeburg, 1844**

DONEGAL: Portnoo cliff, June {1919}, WFJ (NMI) (Johnson, 1920a: p. 10).

***Mesochorus cimbicis* Ratzeburg, 1844**

synonym *Mesochorus confusus* Holmgren, 1860

ARMAGH: Poyntzpass, emerged in May from pupae of *Pteronus pavidus* Lep. (now

Nematus (*Pteronidea*) *pavidus* Serville) (Hymenoptera: Tenthredinidae), collected as larvae feeding on a willow *Salix* bush, WFJ (Johnson, 1919a: p. 37 as *Mesochorus confusus*); LOUTH: Dundalk, ♂ 14 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Mesochorus confusus*).

***Mesochorus dispar* Brischke, 1880**

Ireland (Horstmann, 2002: p. 88).

***Mesochorus fulgurans* Curtis, 1833**

DOWN: Holywood, paralectotypes 3♂♂ lectotype ♀ August and September, AHH (NMI) (Haliday, 1839: p. 114 as *Cryptus*; Morley, 1915: p. 318; Fitton, 1976: p. 333 as *Cryptus*. Identity. ? Junior synonym and junior secondary homonym of *Mesochorus fulgurans*; Horstmann, 2006: p. 1462); LOUTH: Carlingford, {17} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17).

Ireland (Curtis, 1833: 464 taken in shady ravines; Morley, 1913: p. 261 as *Cryptus*. Type labelled "fulgurans" in pencil on green paper; Morley, 1915: p. 318 originally in shady ravines; Townes *et al*., 1965: p. 342; Fitton, 1976: p. 323 holotype ♀ (NMV); Horstmann, 2006: pp 1462 and 1464).

***Mesochorus fuscicornis* Brischke, 1880**

MAYO: Clare Island, ♂ July 1910, CM (Morley, 1911a: p. 15).

***Mesochorus gemellus* Holmgren, 1860**

synonym *Mesochorus tachypus* Holmgren, 1860

DOWN: Rostrevor, ♀ 14 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Mesochorus tachypus*).

***Mesochorus giberius* (Thunberg, 1824)**

synonym *Mesochorus thoracicus* Gravenhorst, 1829

synonym *Mesochorus sylvarum* Curtis, 1833

MAYO: Achill, ♀ June 1909, JNH (Morley, 1911a: p. 15 as *Mesochorus thoracicus*).

Ireland (Horstmann, 2006: p. 1466).

***Mesochorus globulator* (Thunberg, 1824)**

synonym *Mesochorus dimidiatus* Holmgren, 1860

ARMAGH: Poyntzpass, emerged on {22} May {1918} from pupae of *Pteronus pavidus* Lep. (now *Nematus* (*Pteronidea*) *pavidus* Serville) (Hymenoptera: Tenthredinidae), collected as larvae feeding on willow *Salix* bush, WFJ (NMI) (Johnson, 1919a: p. 37 as *Mesochorus dimidiatus*).

******Mesochorus nuncupator* **(Panzer, 1800)** **New to Ireland**

synonym *Mesochorus vittator* (Zetterstedt, 1838)

WICKLOW: Devil's Glen, emerged 16 July 1928, from a half grown larva of the common quaker *Taeniocampa stabilis* (now *Orthosia cerasi* (Fabr.)) (Lepidoptera: Noctuidae) collected 17 June 1928 on hazel *Corylus*, AAL (NMI) (as *vittator*).

******Mesochorus pallipes* **Brischke, 1880** **New to Ireland**

DOWN: Rostrevor, 31 May 1924, WFJ (NMI).

******Mesochorus pectoralis* **Ratzeburg, 1844** **New to Ireland**

DOWN: Tollymore Park, 30 July 1961, AWS (NMI); KERRY: Coumloughra Reeks, 5 July 1934, AWS (NMI); WICKLOW: Athdown, 8 September 1938, AWS (NMI).

***Mesochorus pictilis* Holmgren, 1860**

DONEGAL: Portnoo, cliff, {25} June {1920}, WFJ (NMI) (Johnson, 1921a: p. 107 as *Mesochorus pictilis*).

***Mesochorus punctipleuris* Thomson, 1886**

Ireland (Horstmann, 2002: p. 87).

***Mesochorus splendidulus* Gravenhorst, 1829**

DOWN: Belfast, very rare; GALWAY: no locality, common (Curtis, 1833: 464).

******Mesochorus temporalis* **Thomson, 1886** **New to Ireland**

DOWN: Drinahilly, 13 July 1964, AWS (NMI); KILDARE: Cupidst'n (Cupidstown) Hill, 6 August 1953, AWS (NMI).

***Mesochorus tipularius* Gravenhorst, 1829**

GALWAY: Galway, in larch *Larix* plantations, AHH (Curtis, 1833: 464; Morley, 1915: p. 334).

***Mesochorus unicinctor* (Thunberg, 1824)**

Ireland (Broad, 2006).

***Mesochorus vitticollis* Holmgen, 1860**

ARMAGH: Poyntzpass, {29} June {1912}, in field, WFJ (Johnson, 1913: p. 141; Johnson, 1916a: p. 21); DONEGAL: Coolmore, {4 September 1914}, among sallows *Salix*, WFJ (Johnson, 1915: p. 133).

METOPIINAE

The Metopiinae is an average-sized subfamily comprising about 600 valid, described species world-wide; with the two largest genera, *Exochus* and *Metopius*, accounting for about half of these. Sixty-two species, representing nine genera are recorded from Britain. Small metopiines are sometimes confused with orthocentrines but the two groups can be separated easily on the shape of the antennal scape, which is elongate and subcylindrical in orthocentrines and of the normal ichneumonid type in metopiines.

What little is known of general metopiine biology can be summarized as follows: hosts are Lepidoptera; larval metopiines are koinobiont, solitary and endophagous; oviposition is into the host larva; and adult emergence is from the host pupa, within which a flimsy cocoon is spun. The adult escapes by cutting off the anterior end of the host pupa. Host species are those with larvae which are exposed or lightly concealed (for example, in leaf rolls) and oviposition is often into an early instar. Although there are reasonable numbers of published host records for Metopiinae the dubious value of many means that it is virtually impossible to use them as a basis for generalisations about host associations of individual genera; an all too common situation in the Ichneumonidae. Colour patterns and behaviour suggest that adults of many larger species (for example, *Metopius*) are involved in mimicry complexes as Batesian mimics. When disturbed, adults of some smaller species (*Exochus*) are able to produce a pungent odour, which presumably has a defensive function.

A lot of information on metopiine biology has come from work on the parasites of *Zeiraphera diniana* (Gueneé) (Tortricidae) in the Alps. The most important observations relate to *Chorinaeus funebris* (Gravenhorst), *Triclistus podagricus*

(Gravenhorst) and *Triclistus pygmaeus* (Cresson) and give us some insight into how a group of relatively closely related parasites partition a single host species resource. All three species are univoltine. *C. funebris* and *T. podagricus* are arrhenotokous, males forming 32-57 per cent of samples, whilst *T. pygmaeus* is presumably thelytokous, males being extremely rare (about one per cent of samples). *T. podagricus* tends to occur at lower altitudes than *T. pygmaeus* and *T. podagricus* females mainly attack third instar larvae whilst *T. pygmaeus* prefers those in the fifth instar.

In *Triclistus* the ovipositor is inserted behind the head of the host larva and the egg is deposited in, or adjacent to, the suboesophageal ganglion. In *T. podagricus* the egg does not hatch until about the time of host pupation. Larval growth takes 20 to 25 days but pupation does not take place until the larva has experienced a period of lower temperature. The adult emerges in the autumn but remains within the host pupa until the following spring. In contrast T. pygmaeus overwinters as a fully-grown larva within its cocoon inside the host pupa and pupates in the following spring.

Females of *C. funebris* insert their ovipositor into the host's anus and very quickly deposit an egg in the hind gut. The egg hatches within the gut after about 4 days and the first instar larva makes its way through the gut wall into the haemocoel. The hosts selected by this species are in the last larval instar and if the parasite has not reached the haemocoel before host pupation it perishes (possibly as a result of simple mechanical expulsion at ecdysis). Females of all three species feed on host body fluids after oviposition, in *Triclistus* at the site of ovipositor insertion and in *Chorinaeus* at a wound especially made with the mandibles. Caterpillars parasitized by *C. funebris* continue to feed normally before pupation. The first instar parasite larva is of the caudate type. Larval development takes 20 to 22 days and the fully-grown *C. funebris* larva spins a fine white cocoon within the host pupa in which it overwinters; pupating in the following spring. The first adults were found in June. Males survived for about one month in conditions similar to those in nature, while females survived for between two and three months and in that time individual females laid a maximum of 80 eggs.

******Chorinaeus australis* **Thomson, 1887** **New to Ireland**

DOWN: Rostrevor, 28 May 1929, woods, WFJ (NMI).

***Chorinaeus cristator* (Gravenhorst, 1829)**

DOWN: Greencastle, ♀ 19 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140); LOUTH: Dundalk, ♀ 14 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136).

****Chorinaeus flavipes* Bridgman, 1881 New to Ireland**

SLIGO: Trawalua, 8 July 1936, AWS (NMI); WICKLOW: Rathdrum, 15 June 1926, AWS (NMI).

****Chorinaeus funebris* (Gravenhorst, 1829) New to Ireland**

KILDARE: Royal Canal, 5 August 1951, AWS (NMI); LAOIS: Woodbrook, 13 August 1950, AWS (NMI); MAYO: Killadangan, 30 August 1941, AWS (NMI); Old Head, 28 May 1942, AWS (NMI).

***Chorinaeus longicornis* Thomson, 1887**

ARMAGH: Poyntzpass, {28} June {1915}, in field, WFJ (Johnson, 1916a: p. 20 as *Chorineus*).

****Chorinaeus subcarinatus* Holmgren, 1858 New to Ireland**

synonym *Chorinaeus longicalcar* Thomson, 1887

DUBLIN: Glenasmole, 13 June 1938, AWS (NMI); Johnstown, 23 May 1953, AWS (NMI); Malahide, 1 May 1921, AWS (NMI); KILDARE: Skerries Bog, 19 September 1946 and 17 September 1951, AWS (NMI); WICKLOW: Coan, Glen of Imaal, 8 August 1937, AWS (NMI); Glencree, 30 June 1940, AWS (NMI) (all as *longicalcar*).

***Chorinaeus talpa* (Haliday, 1839)**

Ireland (Haliday, 1839: p. 113 as *Exochus*. April-May; Morley, 1911b: p. 20; Townes *et al*., 1965: p. 347; Fitton, 1976: p. 334 as *Exochus*. Lectotype ♀...(NMI)).

[*Exochus antiquus* Haliday, 1839 nomen dubium

DOWN: Holywood, AHH (Haliday, 1839: p. 113; Morley, 1911b: p. 40; Fitton, 1976: p. 334 type(s) lost...the name remains a *nomen dubium*).]

***Exochus flavomarginatus* Holmgren, 1856**

DONEGAL: Portnoo, cliff, July and {5} September {1918}, WFJ (NMI) (Johnson, 1919a: p. 36; Johnson, 1921a: p. 106); Portnoo shore, ♀ {21} June {1919}, WFJ

(Johnson, 1920a: p. 9 with no lunule); DOWN: Dundrum, ♂ {18} June 1926, WFJ (NMI) (Johnson, 1927: p. 160).

***Exochus gravipes* (Gravenhorst, 1820)**

DONEGAL: Portnoo shore, {6} June {1919}, WFJ (NMI) (Johnson, 1920a: p. 9 var. *incidens* Thomson).

***Exochus lictor* Haliday, 1839**

synonym *Exochus pectoralis* Haliday, 1839

synonym *Exochus decoratus* Holmgren, 1873

DOWN: Newcastle, ♂ {26} August 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Exochus decoratus*); GALWAY: Eyrecourt, September, AHH (Haliday, 1839: p. 113 as *Exochus pectoralis*; Morley, 1911b: p. 47 under *Exochus erythronotus*. It is impossible to ascribe Haliday's species...to any of our descriptions with certainty; Fitton, 1976: p. 334 as *Exochus pectoralis*. ?Holotype ♂...(NMI)...this specimen has the face entirely yellow and may not be the type).

***Exochus mitratus* Gravenhorst, 1829**

synonym *Exochus affinis* Holmgren, 1856

DOWN: Rostrevor, ♀ 30 July {1927}, WFJ (NMI) (Johnson, 1929: p. 136 as *Exochus affinis*).

***Exochus nigripalpis* Thomson, 1887**

ARMAGH: Poyntzpass, ♀ {13} June {1914}, on the bark of Scot's pine *Pinus sylvestris*, WFJ (NMI) (Johnson, 1915: p. 132).

***Exochus notatus* Holmgren, 1858**

DONEGAL: Portnoo roadside, {5} September {1917}, WFJ (NMI) (Johnson, 1920a: p. 9 var. *annulitarsus* Thomson).

***Exochus pictus* Holmgren, 1858**

DOWN: Rostrevor, ♂♂ 20 and 27 May 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157); MAYO: Mulranny, ♀ June, WFJ (Morley, 1911a: p. 13; Morley, 1911b: p. 46).

***Exochus prosopius* Gravenhorst, 1829**

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (Johnson, 1927: p. 160); ARMAGH:

Poyntzpass, Field, {23} August {1920}, WFJ (Johnson, 1921a: p. 106); DONEGAL: Coolmore, September, among sallows *Salix*, WFJ (Johnson, 1915: p. 132; Johnson, 1917a: p. 39 not common); DOWN: Dundrum, ♀ {9} June 1926, WFJ (NMI) (Johnson, 1927: p. 160); Rostrevor, ♂ 14 August 1929, river, WFJ (Johnson, 1930: p. 157); LOUTH: Carlingford, {7} June 1921, WFJ (NMI) (Johnson, 1922a: p. 17).

***Exochus septentrionalis* Holmgren, 1873**

ARMAGH: Poyntzpass, May and June, WFJ (Johnson, 1921a: p. 107 as *Agrypon*); DOWN: Rostrevor, ♂ June 1925, WFJ (Johnson, 1927: p. 161 as *Agrypon septentrionale*).

***Exochus tibialis* Holmgren, 1858**

DONEGAL: Portnoo, {17} September {1918}, WFJ (NMI) (Johnson, 1919a: p. 36).

***Hypsicera curvator* (Fabricius, 1793)**

synonym *Hypsicera mansuetor* (Gravenhorst, 1807)

ARMAGH: Poyntzpass, {12} August {1914}, by sweeping, WFJ (Johnson, 1915: p. 132 as *Polyclistus*); DOWN: Rostrevor, {4, 12, and 14} August and {22} September 1922, ♂ {11} October 1924, WFJ (NMI) (Johnson, 1923: p. 38 as *Polyclistus mansuetor*; Johnson, 1927: p. 160 as *Metacoelus mansuetor*); same locality, ♀ 6 August 1929, field opposite, ♀ 4 September 1929, WFJ (NMI) (Johnson, 1930: p. 157 as *Metacoelus* (*Polyclistus*) *mansuetor*).

***Hypsicera femoralis* (Geoffroy, 1785)**

DOWN: Newcastle, {4} September {October} 1926, in window, WFJ (NMI) (Johnson, 1927: p. 160 as *Metacoelus*).

***Metopius* (*Ceratopius*) *dissectorius* (Panzer, 1805)** **New to Ireland**

MAYO: Old Head, 21 May and 8 June 1942, AWS (NMI).

***Metopius* (*Metopius*) *anxius* Wesmael, 1849**

synonym *Metopius peltator* Marshall, 1874

DONEGAL: Portnoo, ♀ September, cliff, WFJ (Johnson, 1919a: p. 36 as *Metopius peltator*. Scutellum entirely black); KERRY: Killarney, ♂ 1921, EFB (NMI) (det. AWS); WICKLOW: Powerscourt Deerpark, ♂ emerged July 1925, J. P. Brunker

(NMI) (det. AWS) (both unpublished).

***Metopius* (*Peltastes*) *leiopygus* Förster, 1850** **New to Ireland**

KERRY: Darrynane marsh, ♂♂ 22 July 1934, AWS (NMI) (det. JFP); KILDARE: Kilkea Park, ♀ 10 September 1937, AWS (NMI) (det. JFP) (both unpublished).

***Metopius* (*Peltastes*) *pinatorius* Brullé, 1846**

Ireland (Broad, 2006).

***Metopius* (*Peltocarus*) *dentatus* (Fabricius, 1779)**

synonym *Metopius micratorius* (Fabricius, 1804)

DONEGAL: Coolmore, {12 and 16} September {1912 and 1915}, flying over sallows *Salix*, WFJ (NMI) (Johnson, 1913: p. 140; Johnson, 1917a: p. 39; Johnson, 1931a: p. 54); same locality, September, among sallows *Salix*, WFJ (Johnson, 1916a: p. 20 as *Metopius micratorius*); DOWN: near Batt's Wood, ♀ 2 June 1930, on moor, RGA (NMI) (Johnson, 1931a: p. 54); TYRONE: near Cookstown, on mountain, flying over heather *Calluna vulgaris*, TG (NMI) (Johnson, 1917a: p. 39; Johnson, 1931a: p. 54).

***Periope auscultator* Haliday, 1839**

GALWAY: Eyrecourt, ♀ September, prior to 1839, in a grove of larches *Larix*, AHH (NMI) (Haliday, 1839: p. 114; Morley, 1911b: p. 29 his MS (i.e Haliday's) in the Dublin Museum indicates the species as common in Ireland [In annotations made in the museum's copy of Morley (1911b) in 1932, Stelfox states "Quite untrue!", "I much doubt if Hal. ever took more than the one ♀"]; Fitton, 1976: p. 334 holotype ♀...(NMI)).

***Triclistus globulipes* (Desvignes, 1856)**

DONEGAL: Coolmore, {4 and 10 September 1914}, among sallows *Salix*, WFJ (NMI) (det. CM) (Johnson, 1915: p. 132 as *Exochus*).

***Triclistus lativentris* Thomson, 1887**

DOWN: Dundrum, ♀ {22} June 1926, WFJ (NMI) (Johnson, 1927: p. 160).

***Triclistus niger* (Bridgman, 1883)**

DONEGAL: Coolmore, September 1916, among sallows *Salix*, rare, WFJ (Johnson, 1917a: p. 39 as *Exochus*).

***Triclistus pallipes* Holmgren, 1873**

synonym *Triclistus nitifrons* Thomson, 1887

MAYO: Achill, ♀ June 1909, JNH (NMI) (Morley, 1911a: p. 13 as *Exochus nitidifrons*; Morley, 1911b: p. 36 as *Exochus nitidifrons*); Achill Sound, ♀ June 1910, WFJ (Morley, 1911a: p. 13 as *Exochus pallidipes*; Morley, 1911b: p. 36 as *Exochus pallidipes*).

Ireland (Townes *et al*., 1965: p. 353).

***Triclistus podagricus* (Gravenhorst, 1829)** **New to Ireland**

ARMAGH: Poyntzpass, 15 June 1914, hill, 24 June 1916, field, 26 August 1921, road, WFJ (NMI); DOWN: Drinnahilly, 11 July 1965, AWS (NMI).

***Triclistus squalidus* (Holmgren, 1858)**

ARMAGH: Poyntzpass, {3 and 17} August {1915 and 1921}, field, at hogweed *Heracleum*, an uncommon species, WFJ (NMI) (Johnson, 1916a: p. 20 as *Exochus*; Johnson, 1922b: p. 69 as *Exochus*).

***Trieces tricarinatus* (Holmgren, 1858)** **New to Ireland**

KILDARE: Skerries Bog, 19 September and 3 October 1946, AWS (NMI).

MICROLEPTINAE

This small subfamily is Holarctic in distribution and comprises only *Microleptes*. Very few details of the biology are known. An unidentified North American species was reared from the stratiomyid *Allognosta fuscitarsis* (Say) (Diptera). No cocoon was spun, pupation being within the larval skin of the host. The European species *M. obenbergeri* is a parasite of *Chloromyia formosa* (Stratiomyidae).

***Microleptes aquisgranensis* (Förster, 1871)**

ANTRIM: no locality; DONEGAL (West): no locality; Dublin: no locality; KERRY (North): no locality; KERRY (South): no locality; KILDARE: no locality; WESTMEATH: no locality: WEXFORD: no locality (all Stelfox, 1961b: p. 182 as *Miomerus*. 11♂♂ 2♀♀...The dates are from June 3rd to August 6th (mainly June and July)).

***Microleptes rectangulus* (Thomson, 1888)**

synonym *Microleptes egregius* (Schmiedeknecht, 1924)

DONEGAL (East): no locality, AWS; DUBLIN: Phoenix Park, ♂ 9 July 1944, AWS; KILDARE: no locality, AWS; MEATH:no locality, AWS; SLIGO: no locality, AWS; WEXFORD: no locality, AWS; WICKLOW: no locality, AWS(Stelfox, 1961b: p.182 as *Gnathoniella egregius*. 25♀♀...The dates for ♀♀ range from July 11th, through July and August, with a single record from the west coast (Co. Sligo) on October 8th).

***Microleptes splendidulus* Gravenhorst, 1829**

CAVAN: no locality; DONEGAL (East): no locality; DONEGAL (West): no locality; DUBLIN: no locality {Clondalkin(C'l'd'k'n)}, 24 September 1941, AWS; Kiltalown, 21 August 1952, AWS; Lynch Park, ♂ 3 September 1952, AWS} (NMI); GALWAY (South): no locality; KILDARE: no locality; LEITRIM: no locality; WICKLOW: no locality {Golden Hill, ♀ 28 September 1954, AWS} (NMI) (Stelfox, 1961b: p. 181 19♂♂ 3♀♀...These include five specimens given me by friends, namely R. C. Faris, the late J. N. Halbert, the late E. O'Mahony and the late R. A. Phillips. The dates of capture range from July 28th to September 30th (mainly August and September)).

NEORHACODINAE

The Neorhacodinae includes only three very small genera. Three species occur in the Palaearctic region, others being found in North and South America.

Specimens may not at first be recognized as ichneumonids because of their small size, absence of pigment from many wing veins and small number of antennal segments (13 to 15). An important character in the fore wing is the obliteration of the rs-m cross veins caused by fusion of veins RS and M.

Little biology is known other than the hosts are *Spilomena* species (Hymenoptera: Sphecidae) in southern Britain. Host species identified with certainty were *S. enslini* Blüthgen and *S. troglodytes* (Vander Linden). *Neorhacodes* appears to attack the host larva; an elongate-ovoid, fairly thick cocoon is made, and adult emergence takes place about the same as that of the hosts.

***Neorhacodes enslini* (Ruschka, 1922)**

DUBLIN: Skerries, Dublin Road, reared 28 May – 12 June 2003 from cocoons of *Spilomena troglodytes* (Vander Linden) (Hymenoptera: Crabronidae) found in the borings of *Anobium* sp. (Coleoptera) in dead wood attached to a shed wall, COR (Ronayne and O'Connor, 2006: p. 48); TYRONE: Moy, 2♀♀ 22-28 July 1985, malaise trap in a rural garden, MRB (NMI and UM) (Boston, 1986b: p. 116).

Ireland (Notton and Shaw, 1998: p. 214)

OPHIONINAE

The Ophioninae is, world-wide, a large subfamily with 32 genera. In the British Isles there are 23 species representing 4 genera. The adults are often attracted to lights. Consequently the species are relatively easy to sample and the group is well represented in collections. Taxonomically it is one of the best known subfamilies. It is divided into five groups of genera. The *Ophion*-group is the most primitive and is dominant and most diverse in the north temperate zone. There are more species in tropical than temperate zones; with the greatest diversity of species in tropical montane forest between 1200 and 1700 m, although they occur in all habitats from high montane heathland to semidesert.

With few, but notable, exceptions adult ophionines are nocturnal or crepuscular and are pale in colour, have long slender bodies and appendages, enlarged ocelli and large wings. These adaptations are found in several other, unrelated groups of nocturnal ichneumonoids and have been termed the 'ophionoid facies'. Apart from the 'ophionoid facies', which are shared with some members of unrelated subfamilies, the main recognition feature of the Ophioninae is the spurious vein in the fore wing. A small number of ophionine genera comprise species which have lost, presumably secondarily, some of the ophionoid facies and are day flying. Some of the nocturnal species may also be found flying during the day, particularly in dull weather and particularly males.

Females search for nocturnally active caterpillars of various families of Lepidoptera

feeding in exposed positions. Species of *Ophion*, for example, mainly attack Noctuidae. Many ophionine species attack caterpillars in their middle instars but some oviposit into very early larvae, the latter group having about twice as many (24) ovarioles per ovary as the former (6 to 15). In most ophionines the fully-grown larva emerges from the host last instar larva and makes a cocoon in the soil or litter layer, but others wait until the host has spun its cocoon, within which the parasite then spins its own. *Ophion parvulus* Kriechbaumer is exceptional in forming its cocoon within the ruptured pupal remains of the host. Ophionine cocoons are elongate-ovoid, have a felt-like external surface and are generally dark brown in colour with a slightly paler equatorial band.

In Europe most species of the subfamily are univoltine. Some may have more than one generation, but apparent bivoltinism may be an artefact of our inability to discriminate good biological species. There is circumstantial evidence that some species overwinter as fully-grown larvae within their cocoons, while others, possibly only those with a flight period very early in the year, are thought to pass the winter as adults within their cocoons.

***Enicospilus combustus* (Gravenhorst, 1829)** **New to Ireland**

KERRY: near Gap, ♂ 14 July 1933, RCF (NMI) (det. JFP).

***Enicospilus ramidulus* (Linnaeus, 1758)**

CORK: Ballycotton Bay, ♀ 24 August 1976, RA (UM) (det. MRB); DOWN: Killard, ♀ 6 September 1985, IR (UM) (det. JPB); Quoile Wood, ♀ 1 August 1976, in undergrowth, RN (UM) (all unpublished); Rostrevor, ♀ 23 July 1929, mill, WFJ (NMI) (Johnson, 1930: p. 158); Six Road Ends, ♀ 26 August 1965 AGI (UM) (det. MRB) (unpublished); KERRY: Loo Bridge, ♂ 22 July 1908, HWA (Morley, 1908b: p. 276 as *Henicospilus*; Morley, 1915: p. 281 as *Henicospilus*); WICKLOW: Holdenstown, ♂ 9 August 1953, AWS (NMI) (det. AWS) (unpublished); Kilcool, ♀ July 1897, JNH (NMI) (Morley, 1911c: p. 20 as *Henicospilus*; Anon., 1913: p. 43 as *Henicospilus*).

***Ophion forticornis* Morley, 1915** **New to Ireland**

DOWN: Ballymacormick Point, ♀, CR (UM) (det. JPB).

***Ophion luteus* (Linnaeus, 1758)**

synonym *Ophion distans* Thomson, 1888

synonym *Ophion slaviceki* Kriechbaumer, 1892

synonym *Ophion calcaratus* Morley, 1915

ARMAGH: Acton Glebe, Poyntzpass, WFJ; Armagh, WFJ (Johnson, 1904a: p. 256 it very often flies into the house at night, attracted by light; Morley, 1915: p. 268); Poyntzpass, {26} August {1909}, flew to light, WFJ (NMI) (Johnson, 1916: p. 21 as *Ophion distans*); same locality, October, flew to light, WFJ (NMI) (Johnson, 1916a: p. 21 as *Ophion calcaratus*); DONEGAL: Coolmore, {6} September {1912}, {1} October {1913}, flying to lamp light and in house, WFJ (NMI) (Johnson, 1913: p. 141; Johnson, 1916a: p. 21; Johnson, 1917a: p. 40 as *Ophion distans*); same locality, September, at flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1916a: p. 21 as *Ophion distans*); DOWN: Dundrum, ♀ August 1926, in window, WFJ (Johnson, 1927: p. 161 this specimen is peculiar in that its mandibles are without teeth, quite blunt); Greencastle, ♀ 22 August 1930, in house at light, WFJ (NMI) (Johnson, 1931c: p. 141); Lighthouse Island (Copelands), ♂ 1969, CR (UM); Newcastle, July, JJK (Johnson, 1918: p. 109); same locality, ♀, in house, sitting on wall of room, WFJ (Johnson, 1930: p. 158 as *Ophion distans*); Rostrevor, ♀♀ 16 and 20 September 1928, WFJ (NMI) (Johnson, 1929: p. 137); same locality, ♂ ♀ 23 and 27 August 1929, 5 September 1929, house at light, 4 and 10 September 1929, ♂ with no ramellus, vicarage at light, WFJ (NMI) (Johnson, 1930: p. 158); same locality, October 1922, to light in house, WFJ (Johnson, 1923: p. 38 as *Ophion calcaratum*); DUBLIN: Dollymount, ♂ 22 August 1937, at light, EOM (NMI) (det. AWS as *Ophion slaviceki*) (unpublished); MAYO: Clare Island, ♀♀ September 1910 and June 1911, WFJ (NMI) (Morley, 1911a: p. 14); TYRONE: Moy, ♂ 16 August 1983, garden flowerbed, RN (UM) (det. MRB and RN) (unpublished); WEXFORD: Kilmore, AB (Morley, 1915: p. 268).

***Ophion mocsaryi* Brauns, 1889**

DOWN: Rostrevor, ♀♀ 8 July 1927 and 24 July 1928, WFJ (NMI) (Johnson, 1929: p. 137); same locality, ♀ 4 September 1929, house at light, WFJ (Johnson, 1930: pp 157-158).

***Ophion obscuratus* Fabricius, 1798**

synonym *Ophion obscurus* Fabricius, 1804

ARMAGH: Armagh, WFJ (Johnson, 1904a: p. 256 as *Ophion obscurum*; Morley, 1915: p. 275 as *Ophion obscurus*); DOWN: Killard, ♀ 26 February 1974, dry sand cliffs, CR (UM) (det. JPB); Stormont, ♀ 11 May 1960, mercury vapour trap, AGI (UM) (det. JPB); Bangor, ♀ 15 May 1970, CR (UM) (det. JPB); KILDARE: Kilkea Park, ♂ 30 April 1934, AWS (NMI) (det. AWS as *Ophion obscurus*) (all unpublished) .

***Ophion pteridis* Kriechbaumer, 1879** **New to Ireland**

DOWN: Lighthouse Island (Copelands), ♀ 10 August 1984, AGI (UM); same locality, ♀ 1969, CR (UM); Murlough NNR, ♀ 4 August 1984, ultraviolet trap, BHN (UM) (all det. MRB and RN).

***Ophion scutellaris* Thomson, 1888**

ARMAGH: Poyntzpass, {21} July {1921}, garden, on under-side of laurel *Prunus laurocerasus* leaf, WFJ (Johnson, 1922b: p. 69); DONEGAL: Coolmore, {10 and 11} September {1915}, in window of bungalow and among sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 21); DOWN: Ballyroney, ♂ 28 July 1960, AWS (NMI) (det. AWS) (unpublished); Rostrevor, 12, 21 and 28 August, 5 September 1929, in house at light, 5 September 1929, vicarage at light, WFJ (NMI) (Johnson, 1930: p. 158); Portavo, ♀ 3 May 1969, AGI (UM) (det. JPB); Murlough NNR, ♂♂ 1-15 April 1985, Malaise trap, BHN (UM) (det. MRB and RN) (both unpublished).

***Ophion ventricosus* Gravenhorst, 1829** **New to Ireland**

WICKLOW: Devil's Glen, 18 June 1950 and 3 June 1951, AWS (NMI).

ORTHOCENTRINAE

This moderate-sized subfamily comprises small ichneumonids which are often only

weakly sclerotized (and consequently many dry, pinned specimens in collections have a distorted, shrivelled appearance). Two of the genera, *Orthocentrus* and *Stenomacrus*, have large numbers of species and the subfamily is world-wide in distribution, with about 450 described species in total. Although little serious work has been done on the British Isles fauna there are records of about 100 species. Part of the subfamily (that sometimes recognised as the Helictinae) was part of a 'wastebasket' group known then as Microleptinae or Oxytorinae. Some of the *Orthocentrus*-group might be confused with small metopiines but can be recognized easily by their characteristic elongate, subcylindrical antennal scape.

Little is known about the biology of orthocentrines, although most workers, on the basis of the few published records, confidently describe them as parasites of fungus gnats (Diptera). Adult orthocentrines are most often collected in cool, damp habitats. Females of some arctic and subarctic species of *Stenomacrus* are brachypterous. The species *Neurateles papyraceus* Ratzeburg has a long telescopic metasoma which bears very conspicuous erect bristles. It has been reared from larvae of *Xylosciara lignicola* (Winnertz) (Sciaridae) found under bark of pine and spruce. It has been suggested that some species are apparently highly specialised, for example, *Proclitus edwardsi* Roman may attack only *Brachypeza radiata* Jenkinson, a mycetophilid developing only in the fungus *Pleurotus cornucopiae* which is itself confined to *Ulmus*. Despite these and other rearings from reliably identified hosts the published data do not even indicate whether orthocentrines develop as ecto- or endoparasites. They are almost certainly koinobiont endoparasitoids because, in *Orthocentrus* at least, adult emergence is from the host pupa, showing that the larva is endophagous. Cocoons of the 'helictine' group are described as tightly woven; thin or semi translucent or robust; and brown in colour. The last larval instar of at least one species has well-developed caudal bristles.

***Aperileptus albipalpus* (Gravenhorst, 1829)** **New to Ireland**

WICKLOW: Meeting of the Waters (Meeting Waters), 13 October 1929, AWS (NMI); Powerscourt Deerpark (dpk), 8 October 1929, AWS (NMI).

***Aperileptus impurus* Förster, 1871** **New to Ireland**

synonym *Aperileptus inamoenus* Förster, 1871

DOWN: Drinnahilly, 6 June 1965, AWS (NMI) (as *inamoenus*).

***Aperileptus vanus* Förster, 1871** **New to Ireland**

DOWN: Donard Lodge (Lo), 25 September 1958, AWS (NMI); Tollymore Park, 12 May 1961, AWS (NMI); DUBLIN: Saggart, 28 April 1943, AWS (NMI); WICKLOW: Athdown, 30 July 1936, AWS (NMI); Glendalough, 4 June 1937, AWS (NMI); Woodend, 14 September 1954, AWS (NMI).

***Dialipsis exilis* Förster, 1871** **New to Ireland**

synonym *Dialipsis crassipes* (Thomson, 1888)

DOWN: Tollymore, ♀ 21August1984, MB (NMI) (det. MB); WICKLOW: Athdown, ♀ 25 July 1943, AWS (NMI) (det. JFP as *Dialipsis crassipes*).

***Entypoma robustum* Förster, 1871** **New to Ireland**

CAVAN: Farrinseer, 3 October 1959, AWS (NMI); DUBLIN: Glenasmole, 6 October 1933 and 3 November 1937, AWS (NMI).

***Entypoma suspiciosum* (Förster, 1871)** **New to Ireland**

ANTRIM: Massereene Park, 26 September 1936, EOM (NMI); DUBLIN: Balbriggan, 9 October 1932, AWS (NMI); Glenasmole, 28 October 1936, AWS (NMI); WICKLOW: Bellevue, 21 September 1937, AWS (NMI); Devil's Glen, 16 June 1940, AWS (NMI).

***Eusterinx* (*Eusterinx*) *argutula* Förster, 1871** **New to Ireland**

synonym *Eusterinx divulgata* Förster, 1871

WICKLOW: Athdown, ♀ 8 September 1938, AWS (NMI) (det. JFP as *Eusterinx divulgata*).

***Eusterinx* (*Eusterinx*) *oligomera* Förster, 1871** **New to Ireland**

WICKLOW: Glencree, ♀ 30 June 1940, AWS (NMI) (det. JFP).

[*Helictes cruentatus* (Haliday, 1839) nomen nudem

Ireland (Haliday, 1839: p. 115 as *Cryptus*. In shady places).]

***Helictes erythrostoma* (Gmelin, 1790)**

Ireland (Broad, 2006).

***Helictes varius* (Haliday, 1839)**

DUBLIN: Portmarnock, ♂ June, on the coast, AHH (Haliday, 1839: p. 115 as *Cryptus*; Halbert, 1908: p. 152; Morley, 1915: p. 25; Fitton, 1976: p. 334 as *Cryptus*. Type(s)...lost...the name remains a *nomen dubium*).]

[*Helictes erythrostoma* (Gmelin, 1790)

synonym *Cryptus* (*Helictes*) *fulvicornis* Haliday, 1839

Ireland (Haliday, 1839: p. 115 as *Cryptus fulvicornis*; Fitton, 1976: p. 333 lectotype ♀...paralectotypes 3♀♀(NMI)...Identity. ?Junior synonym of *Helictes erythrostoma*).]

***Hemiphanes flavipes* Förster, 1871**

Ireland (Broad, 2006).

***Hemiphanes gravator* Förster, 1871** **New to Ireland**

KILDARE: Kilkea Park (Pk), ♂ 5 September 1937, AWS (NMI) (det. JFP).

***Megastylus cruentator* Schiødte, 1838**

synonym *Megastylus conformis* Förster, 1871

synonym *Helictes cruentatus* (Haliday, 1839)

synonym *Megastylus mediator* Schiødte, 1838

ARMAGH: Poyntzpass, {13} October {1920}, at laurels *Prunus laurocerasus*, WFJ (NMI) (Johnson, 1921a: p. 107); DONEGAL: Coolmore, September, at flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1916a: p. 21 as *Megastylus conformis*); same locality, September, at Umbelliferae, WFJ (Johnson, 1916a: p. 21 as *Helictes mediator*); MAYO: Sraheens Lough, ♂ June, WFJ (Morley, 1911a: p. 15 as *Megastylus mediator*).

Ireland (Morley, 1913: p. 262 as *Cryptus* (*Helictes*) *cruentatus*. Type selected by me from a series of nine Irish specimens; Morley, 1915: p. 18 as *Cryptus cruentatus*. Haliday mentions it from...shady places; Fitton, 1976: p. 333 as *Cryptus cruentatus*. Lectotype ♀...(NMI) by fixation of Morley...examined. Identity. ? junior synonym of *Megastylus cruentator*).

***Megastylus excubitor* (Förster, 1871)** **New to Ireland**

DOWN: Tollymore Park, 21 May 1961 and 27 May 1962, AWS (NMI); MAYO: Old Head, 23 May 1942, AWS (NMI).

***Megastylus flavopictus* (Gravenhorst, 1829)** **New to Ireland**

CORK: Lodge Woods (Wds), Glengarriff, 20 July 1935, AWS (NMI); DOWN: Donaghadee (D'dee), 2 June 1938, AWS (NMI); DUBLIN: St Anne's, Clontarf, 25 May 1936, EOM(NMI); The Island, 14 August 1945, AWS (NMI); Verschoyle's Hill, 18 September 1954, AWS (NMI); KILDARE: Landenstown, 2 August 1953, AWS (NMI); MEATH: Ferns Lock, 3 July 1938, AWS (NMI); WEXFORD: Curracloe, 27 July 1937, AWS(NMI); WICKLOW: Devil's Glen, 29 September 1954, AWS (NMI); Killoughter, 18 May 1952,AWS (NMI); The Murrough, 30 May 1954, AWS (NMI).

***Megastylus orbitator* Schiødte, 1838**

Ireland (Broad, 2006).

***Neurateles falcatus* (Thomson, 1897)** **New to Ireland**

WICKLOW: Powerscourt, ♀ 20 June 1937, AWS (NMI) (det. AWS and MWG).

***Neurateles papyraceus* Ratzburg, 1848**

synonym *Neurateles britteni* (Waterson, 1929)

DUBLIN: Glenasmole, ♀ 13 June 1933, AWS (NMI) (det. AWS as *Neurateles britteni*, conf. JFP).

Ireland (Morley, 1911b: p. 53 Haliday told Marshall that he had discovered...here (and a MS. note of his in the Dublin Museum indicates that he found it commonly in Ireland). In an annotation, Stelfox states "A specimen, ♀, is in the Hal. coll and so named by him").

***Orthocentrus asper* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Donard Lodge (Lo), 26 September 1965, AWS (NMI); Tollymore Park (Pk), 29 September 1957, AWS (NMI); DUBLIN: Glenasmole, 30 August 1935 and 5 June 1940, AWS (NMI); Slade Brook (Bk), 10 August 1951, AWS (NMI); The Slade of Saggart, ♀♀ 22 August 1935, JFP (BMNH); same locality, 27 October 1935, AWS (NMI); TIPPERARY: Aherlow, 28 September 1943, AWS (NMI); WICKLOW: Deputy's Pass, 2 May 1940, AWS (NMI); Devil's Glen, 30 September 1948, AWS

(NMI); Dowry, 26 September 1953, AWS (NMI); Leitrim Barracks (B.), 11 August 1940, AWS (NMI); Powerscourt Demense (Dm), 20 September 1933, AWS (NMI).

******Orthocentrus corrugatus* **Holmgren, 1858** **New to Ireland**

CAVAN: Killykeen, 29 September 1940, RCF (NMI); DUBLIN: Killakee, 21 October 1954, AWS (NMI); Whitechurch, 19 October 1954, AWS (NMI).

******Orthocentrus frontator* **(Zetterstedt, 1838)** **New to Ireland**

DOWN: Tollymore Park, 19 May 1957, AWS (NMI); DUBLIN: Glenasmole, 19 September 1937, AWS (NMI); KILDARE: Morristownbiller, 9 June 1954, AWS (NMI); Royal (R.) Canal, 8 August 1954, AWS (NMI); LAOIS: Portarlington, 11 August 1935, AWS (NMI); LEITRIM: Tullaghan, October 1937, AWS (BMNH); LONGFORD: Castle Forbes (C' Forbes), 30 July 1938, AWS (NMI); TIPPERARY: Lough (L.) Diheen, Galtees, 29 May 1944, 4200ft, AWS (NMI); WICKLOW: Tinode, 26 May 1954, AWS (NMI).

***Orthocentrus fulvipes* Gravenhorst, 1829**

ARMAGH: Poyntzpass, {26} January {1914}, in moss from a wood, WFJ (NMI) (Johnson, 1915: p. 132; Johnson, 1920c: p. 66).

Ireland (Morley, 1911b: p. 62 Haliday's MS. in Dublin Museum, indicates it as taken commonly by himself in Ireland).

******Orthocentrus marginatus* **Holmgren, 1858** **New to Ireland**

ARMAGH: Poyntzpass, 13 October 1920, WFJ (NMI); DONEGAL: Lough (L.) Eske, 12 August 1938, AWS (NMI); DUBLIN: The Slade of Saggart, 17 November 1935, AWS (NMI).

******Orthocentrus monilicornis* **Holmgren, 1858** **New to Ireland**

DUBLIN:Phoenix Park, ♀ 26 September 1937, AWS (BMNH); KILDARE: Kilkea Park, ♀ September 1937, AWS (BMNH); MEATH: near Summerhill, ♀ 3 October 1937 (BMNH); WESTMEATH: Killucan, ♀ 6 October 1937, AWS (BMNH).

******Orthocentrus petiolaris* **Thomson, 1897** **New to Ireland**

TIPPERARY: Lough (L.) Borhean, 7 June 1944, 1600ft, AWS (NMI); DUBLIN: Glenasmole, 11 October 1936, AWS (NMI).

***Orthocentrus radialis* Thomson, 1897** **New to Ireland**

CAVAN: Lough (L.) Gowna, 15 July 1939, RCF (NMI); KILDARE: Brockagh, 29 August 1948, AWS (NMI); Landenstown, 28 September 1951, AWS (NMI); Rye Water, 3 June 1952, AWS (NMI); Skerries Bog, 3 October 1946, AWS (NMI); Upper Dodder, 14 June 1950, AWS (NMI); WICKLOW: Dromgoff Brook (Bk), 17 October 1942, AWS (NMI); Glending, 19 September 1953, AWS (NMI).

***Orthocentrus sannio* Holmgren, 1858** **New to Ireland**

DOWN: Tollymore Park, 5 July 1961, AWS (NMI); DUBLIN: Saggart, 8 September 1935, AWS (NMI); WICKLOW: Golden Hill, 1 May 1935, AWS (NMI); Powerscourt Deerpark (Dpk), 7 June 1940, AWS (NMI).

***Orthocentrus spurius* Gravenhorst, 1829**

Ireland (Morley, 1911b: p. 53 said by Haliday, in his MS. diary...to have been taken commonly by him in Ireland).

***Orthocentrus winnertzi* Förster, 1850** **New to Ireland**

synonym *Orthocerus stigmaticus* Holmgren, 1856

DUBLIN: Harold's Cross, 14 August 1936, AWS (NMI); Lucan, 3 May 1944, AWS (NMI); LEITRIM: Tullaghan, 8 October 1937, AWS (NMI); WICKLOW: Clara, 28 April 1940, AWS (NMI) (all as *stigmaticus*).

***Pantisarthrus lubricus* (Förster, 1871)** **New to Ireland**

synonym *Pantisarthrus inaequalis* Förster, 1871

DOWN: Donard Lo (Lodge), 10 October 1965, AWS (NMI); DUBLIN: Saggart, 18 November 1936, AWS (NMI); The Slade of Saggart, 20 December 1936, AWS (NMI); WICKLOW: Ballylusk, 21 April 1933, AWS (NMI) (all as *inaequalis*).

***Picrostigeus debilis* (Gravenhorst, 1829)** **New to Ireland**

CLARE: Ballynalackan, 9 August 1955, AWS (NMI); DUBLIN: west of Killeen, 30 September 1945, AWS (NMI); WICKLOW: Glending, 14 September 1954, AWS (NMI).

Ireland: no locality, AHH (NMI).

***Picrostigeus recticauda* (Thomson, 1897)** **New to Ireland**

DOWN: Newcastle, 10 September 1955, AWS (NMI); Tollymore Park (Pk), 1 September 1957, AWS (NMI); DUBLIN: Glenasmole, 24 April 1938, AWS (NMI); Verschoyle's Hill, 19 May 1954, AWS (NMI); Slade of Saggart, 22 August 1935, JFP (BMNH); KILDARE: Carton, 30 July 1950, AWS (NMI); WICKLOW: Powerscourt, 21 September 1930, AWS (NMI).

***Plectiscidea* (*Fugatrix*) *communis* (Förster, 1871)** **New to Ireland**

TYRONE: Moy, ♀ 15-21 October 1984, Malaise trap, MB (NMI) (det. MB as *Dialipsis*).

***Plectiscidea* (*Plectiscidea*) *eurystigma* (Thomson, 1888)**

ARMAGH: Poyntzpass, {13} October {1920}, at laurels *Prunus laurocerasus*, WFJ (NMI) (Johnson, 1921a: p. 107 as *Plectiscus*).

***Plectiscus impurator* Gravenhorst, 1829**

synonym *Stenomacrus ventralis* (Holmgren, 1858)

WEXFORD: Enniscorthy, ♂♂, AB (Morley, 1911b: p. 72 as *Stenomacrus ventralis*).

***Plectiscus ridibundus* (Gravenhorst, 1829)**

Ireland (Morley, 1911b: p. 71 as *Stenomacrus*. Haliday, in his Dublin Museum MS., claims to have taken it commonly in Ireland (NMI)).

***Proclitus comes* (Haliday, 1839)**

Ireland (Morley, 1915: p. 16 Haliday described it from Ireland (NMI)).

***Proclitus fulvicornis* Förster, 1871** **New to Ireland**

synonym *Proclitus periculosus* Förster, 1871

DUBLIN: Firhouse, 3 November 1954, AWS (NMI) (as *periculosus*).

***Proclitus paganus* (Haliday, 1839)**

GALWAY: Eyrecourt, lectotype ♀ paralectotype September, AHH (NMI) (Haliday, 1839: p. 116 as *Cryptus*; Morley, 1915: p. 16; Fitton, 1976: p. 333 as *Cryptus*).

***Proclitus praetor* (Haliday, 1839)**

Ireland (Haliday, 1839: p. 116 as *Cryptus*. In shady places; Morley, 1915: p. 15; Fitton, 1976: p. 333 as *Cryptus*. Lectotype ♀ paralectotypes 2♂♂6♀♀...(NMI)).

***Proclitus socius* (Haliday, 1839)**

Ireland (Morley, 1915: p. 15 Haliday described it from Ireland).

******Stenomacrus carbonariae* **Roman, 1939** **New to Ireland**

CAVAN: Farrinseer, 30 September 1934, RCF (NMI); DOWN: Murlough Ho (House), 19 September 1964, dunes, AWS (NMI); Rostrevor, 18 September 1964, AWS (NMI); Tollymore Park, 10 September 1961, AWS (NMI); DUBLIN: Verschoyle's Hill, 18 September 1954, AWS (NMI); WICKLOW: Athdown, 29 September 1952 and 25 September 1954, AWS (NMI); Devil's Glen, 29 September 1954, AWS (NMI); Glending, 5 October 1952, AWS (NMI).

******Stenomacrus caudatus* **(Holmgren, 1858)** **New to Ireland**

ANTRIM: Killead, August 1923, WFJ (NMI); Selshan, 2 June 1928, AWS (NMI); DUBLIN: Johnstown, 28 August 1953, AWS (NMI); KILDARE: Glending, 8 September 1940, AWS (NMI); Royal Canal, 12 and 30 July 1944, AWS (NMI); TIPPERARY: Lough (L.) Borheen, Galtees, 7 June 1944, *circa* 1450ft below lough, AWS (NMI).

******Stenomacrus celer* **(Holmgren, 1858)** **New to Ireland**

DUBLIN: Glenasmole, 9 June 1937 and 13 June 1938, AWS (NMI).

***Stenomacrus cognatus* (Holmgren, 1858)**

synonym *Stenomacrus confinis* (Holmgren, 1856)

ANTRIM: Bushfoot, 9 June 1928, AWS (NMI) (as *confinis*) (unpublished); ARMAGH: Poyntzpass, field, August, sweeping and at angelica *Angelica*, WFJ (Johnson, 1914a: p. 66 as *Promethus*; Johnson, 1921a: p. 106 as *Promethus*); DOWN: Slieve Muck North (Sl. Muck N), 2 July 1961, AWS (NMI); DUBLIN: Glenasmole, 19 September 1937, 6 October 1939, 5 June 1940 and 5 October 1951, AWS (NMI) (as *confinis*); TIPPERARY: Lough (L.) Borheen, 7 June 1949, *circa* 1450ft below lough, AWS (NMI) (as *confinis*); Glending Wood (Wd), 15 September 1938 and 9 October 1946, AWS (NMI) (as *confinis*) (all unpublished).

***Stenomacrus cubiceps* (Thomson, 1897)**

MAYO: Clare Island, 2♀♀ July 1910, CM (NMI) (Morley, 1911a: p. 13 as *Orthocentrus*; Morley, 1911b: p. 77).

Ireland (Morley, 1921: p. 55).

******Stenomacrus curvicaudatus* **(Brischke, 1871)** **New to Ireland**

CAVAN: Cornafean, 29 October 1933, west of lake, RCF (NMI); Portlongfield, 19 April 1943, RCF (NMI); DOWN: Ballyroney, 10 August 1956, AWS (NMI); Donaghadee (D'dee), 2 June 1938, AWS (NMI); DUBLIN: Dartry, 25 October 1954, AWS (NMI); Killeen, 1 and 5 October 1947 and 1 October 1949, AWS (NMI); Marlfield, 14 October 1947, AWS (NMI); KILDARE: Athgarret, 23 August 1939, AWS (NMI); Royal (R.) Canal, 23 April 1944 and 3 October 1945, AWS (NMI); TIPPERARY: Lough (L.) Curra, Galtees, 10 June 1944, +2000ft, AWS (NMI).

Ireland: no locality, AHH (NMI).

******Stenomacrus deletus* **(Thomson, 1897)** **New to Ireland**

DUBLIN: Glenasmole, 24 June 1938 and 15 May 1940, AWS (NMI); Harold's Cross, 16 September 1941, AWS (NMI); KERRY: Derrynane, 21 July 1934, in hotel, AWS (NMI); LOUTH: Essexford, 1 July 1943, AWS (NMI); WICKLOW: Athdown, 19 June 1938, AWS (NMI); Glending Wood (Wd), 25 June 1944, AWS; Imaal, 14 July 1940, AWS (NMI); Lough (L.) Dan, 22 September 1940, AWS (NMI).

******Stenomacrus exserens* **(Thomson, 1897)** **New to Ireland**

DOWN: Newcastle, 10 September 1955, AWS (NMI); WEXFORD: Curracloe, 22 July 1937, AWS (NMI).

***Stenomacrus flaviceps* (Gravenhorst, 1829)**

LIMERICK: Lyracappul, 10 June 1944, +2600ft, AWS (NMI); MAYO: Old Head, 4 September 1941, AWS (NMI); TIPPERARY: Lough (L.) Borheen, 7 June 1944, *circa* 1450ft below the lough, AWS (NMI) (all unpublished).

Ireland (Morley, 1911b: p. 67 Haliday, in his MS. diary, now in the Dublin Museum, says he found it commonly in Ireland).

***Stenomacrus incisus* (Gravenhorst, 1829)**

Ireland (Morley, 1911b: p. 68 Haliday's MS. records it as taken by himself commonly in Ireland).

***Stenomacrus lapponicus* Horstmann and Yu, 1999** **New to Ireland**

synonym *Stenomacrus intermedius* (Holmgen, 1856)

DONEGAL: Isle (I.) of Doagh, 21 June 1955, AWS (NMI); Old Head, 9 June 1955, AWS (NMI); DUBLIN: Jobstown, 8 September 1948, AWS (NMI); WICKLOW: Glending, 16 September 1953, AWS (NMI); Woodend, 5 June 1952 and 22 September 1954, AWS (NMI) (all as *intermedius*).

***Stenomacrus laricis* (Haliday, 1839)**

Synonym: *Stenomacrus concinnus* (Holmgren, 1856)

DOWN: Holywood, on larches *Larix*, AHH (Haliday, 1839: p. 117 as *Bassus*; Morley, 1911b: p. 70; Fitton, 1976: p. 332 as *Atractodes*. Type(s) ♀...lost. Identity. ?*Stenomacrus laricis*); Tollymore Park (Pk), 8 October 1957, AWS (NMI); DUBLIN: Glenasmole, 3 November 1937 and 6 October 1938, AWS (NMI); Lynch Park (Pk), 22 June 1952, AWS (NMI); SLIGO: Tullaghan, 7 October 1937, shore, AWS (NMI); TIPPERARY: Ballinacourty (B'c't'y), 3 June 1944, AWS (NMI); WICKLOW: Athdown, 19 June 1938 and 16 August 1939, AWS (NMI); Baltinglass, 30 June 1937, AWS (NMI); Coan, 16 July 1940, AWS (NMI); Cronyburn, 18 August 1940, AWS (NMI); Devil's Glen, 16 June 1940, AWS (NMI); The Quill, 10 July 1940, BPB (NMI) (all as *concinnus*) (all unpublished).

***Stenomacrus ochripes* (Holmgren, 1858)** **New to Ireland**

CORK: Glengarriff, 19 and 21 July 1935, AWS (NMI); DUBLIN: Gollierstown (Gollierst'n), 11 September 1946, AWS (NMI).

***Stenomacrus palustris* (Holmgren, 1858)** **New to Ireland**

DOWN: Donard Lodge (Lo), 3 September 1964, AWS (NMI); DUBLIN: Killeen, 1 and 5 October 1947, AWS (NMI); KILDARE: Royal (R.) Canal, 19 October 1947, AWS (NMI); LEITRIM: Shriff, Lough (L.) Gill, 11 June 1959, AWS (NMI); SLIGO: Trawallua, 10 August 1933, AWS (NMI); Lugnaquilla (Lug), 8 August 1937, 1000-2000ft, GMS (NMI).

***Stenomacrus silvaticus* (Holmgren, 1858)** **New to Ireland**

CAVAN: Farrinseer, 30 September 1934, RCF (NMI); DONEGAL: Horn Head, 9

June 1955, AWS (NMI); DUBLIN: Glenasmole, 1 August 1953, AWS (NMI).

***Stenomacrus ungula* (Thomson, 1897)** **New to Ireland**

CARLOW: Carriglead, ♀ 15 May 1935, AWS (NMI) (det. MWRG).

***Stenomacrus vafer* (Holmgren, 1858)** **New to Ireland**

Ireland: no locality, AHH (NMI).

***Symplecis bicingulata* (Gravenhorst, 1829)** **New to Ireland**

synonym *Symplecis xanthostoma* Förster, 1871

DOWN: Tollymore, 18 July 1961, AWS (as *xanthostoma*) (NMI); LONGFORD: Castle (C') Forbes, 30 July 1938, AWS (as *xanthostoma*) (NMI); WICKLOW: Devil's Glen, 6 November 1938, AWS (as *xanthostoma*) (NMI).

ORTHOPELMATINAE

This subfamily comprises a single, Holarctic genus, *Orthopelma*. Eight species are known, of which two occur in the British Isles.

Orthopelma species are koinobiont endoparasites of gall-forming Cynipidae (Hymenoptera) - *Diplolepis* on *Rosa* and *Diastrophus* on *Rubus*. The common European species, *O. mediator* (Thunberg), is univoltine and adults emerge from galls of its regular host, *Diplolepis rosae* (Linnaeus) on *Rosa*, at about the same time as the host itself, from about mid May to mid July in Britain. The host larval stage is attacked and the parasite is solitary and endophagous. There is no external sign of the parasite until about the end of September, when it has consumed the entire body contents of its host, to which it imparts its own shape. The host skin is cast off after a few days and in a few weeks, about the end of October, the fully-grown *Orthopelma* larva begins to assume a prepupal form. These developments are more pronounced about April, before pupation takes place. Apparently no cocoon is spun. Within the gall *O. mediator* itself may be subject to attack by the chalcid *Pteromalus bedeguaris* (Thomson) (Hymenoptera, Pteromalidae), which develops externally on the prepupa or pupa.

***Orthopelma mediator* (Thunberg, 1824)**

synonym *Orthopelma luteolator* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, bred from *Rhodites rosae* L. (now *Diplolepis rosae* (L.)) (Hymenoptera: Cynipidae), WFJ (NMI) (Johnson, 1921a: p. 105 as *Orthopelma luteolator*); same locality, emerged April, May, reared from bedeguar of *Rhodites rosae* collected September 1920 in a hedge by the roadside, WFJ (NMI) (Johnson, 1922b: pp 67, 69 as *Orthopelma luteolator*).

PHRUDINAE

This is a small subfamily comprising eleven genera. Six species, representing two of the five European genera, have been found in the British Isles. Very little is known of their host associations or biology, they are rather diverse in structure and to some extent the grouping is one of convenience. Care needs to be taken not to overlook the smaller phrudines when sorting samples; they can easily be confused with small cryptines.

From the very little that is known it has been concluded that Phrudinae parasitize beetle larvae. The European species *Earobia paradoxa* (Perkins) is a koinobiont endoparasitoid of a derodontid. In North America species of *Peucobius* have been collected in large numbers from immature staminate cones of *Pinus* species.

In central Europe *E. paradoxa* and its host, *Laricobius erichsonii* Rosenhauer, are univoltine. Only females of *E. paradoxa* are known so it can be assumed that the species is thelytokously parthenogenetic. From mid May to mid June females search on the bark of conifers for third and fourth instar larvae of *L. erichsonii*, which feeds on adelgids. The host is usually stabbed with the ovipositor on the lateral or ventral part of the posterior third of the abdomen. The ovipositor remains inserted for about 20 seconds and the host becomes temporarily paralyzed. The egg is deposited in the host's fat body and by the time it is ready to hatch has increased considerably in volume (about 20 times). The females frequently host-feed at the site of ovipositor insertion and they also feed on adelgid honeydew. The ichneumonid larva remained small whilst the host continued to be active. When the beetle larva descended to the

forest floor litter in midsummer (where it would normally pupate and an adult beetle would emerge three or four weeks later) the parasite grew rapidly, finally devouring the entire host except for its cuticle. The phrudine larva then broke out of the host skin and spun a whitish cocoon studded externally with soil particles. The adult emerges in the following spring.

***Astrenis sinuatus* (Roman, 1909)** **New to Ireland**

ANTRIM: Rea's Wood, 2 ♀♀ 14-21 May 1985, Malaise trap, 22 May 1985, MRB and RN (UM) (det. MRB and RN as *Phrudus sinuatus*); TIPPERARY: Ballinacourty (B'c't'y), ♀ 6 June 1944, AWS (det. JFP as *Phrudus*, conf. JPOC).

***Phrudus defectus* Stelfox, 1966**

DOWN: Newcastle, in a small rough plot of uncultivated ground at foot of my own garden AWS; Tollymore Park, AWS (Stelfox, 1966b: p. 66); FERMANAGH: Marble Arch, ♂ 27 May 1984, deciduous woodland, MRB and RN (UM) (det. MRB and RN) (unpublished); KILDARE: Carton, AWS; WICKLOW: Ballyhenry, AWS (all Stelfox, 1966b: p. 66); [WICKLOW]: Cloughleagh, in the Upper Liffey Valley, 2♂♂7♀♀ 3 June 1953 (including ♀ type and ♂ allotype) (lectotype ♀ 3♂♂5♀♀ paralectotypes), swept in the remnants of a native wood, AWS (Stelfox, 1966b: p. 66; Fitton, 1976: p. 349 Cloughleague on specimen label); Manor Kilbride, AWS; the Murrough, fens, AWS (Stelfox, 1966b: p. 66 my dates of capture range from 21st May until 11 June only).

Ireland (Gauld and Fitton, 1980: p. 199).

***Phrudus monilicornis* Bridgman, 1886** **New to Ireland**

DOWN: Kilkeel, ♀ 19 July 1931, AWS (NMI) (det. AWS, conf. JPOC).

PIMPLINAE

The Pimplinae is moderately large and is well represented in both temperate and tropical zones. Many species are important in controlling populations of pest insects, and as a result the subfamily is relatively well studied. The Pimplinae was one the traditional, five subfamilies into which the family was divided. However,

improvements in ichneumonid taxonomy over the last 50 years have resulted in the separation of obviously unrelated elements and the better definition of tribes and genera. The latest work recognises the rhyssines, poemeniines and diacritines as distinct subfamilies. Probably this subfamily, even as now restricted, is biologically more diverse than any other, attacking a very wide range of hosts and including ecto- and endoparasitic species.

With the exception *of Clistopyga*, *Tromatobia*, *Zaglyptus* and the *Polysphincta*-group, which are associated with spiders and their egg cocoons, the genera of the tribe Ephialtini develop as ectoparasites of holometabolous insect larvae, prepupae or pupae that are more or less fully concealed: in wood or stems, under bark, in spun vegetation, or in cocoons. The host is stung and permanently paralyzed or possibly killed prior to oviposition and the egg is laid on or adjacent to it. The conditions that the developing pimpline larva experiences are physiologically relatively undemanding and have little to do with limiting host range. Thus many pimplines have host ranges which are taxonomically very broad and are, instead, restricted in terms of an 'ecological niche'. Examples of niche-specialization with great disparity in the actual hosts utilized are found in many species of *Scambus*.

The evolution of the the *Polysphincta*-group (then recognized as a discrete tribe the Polysphinctini), parasitizing mobile immature spiders, can be traced from ancestral habits of attacking spider egg cocoons, and in particular those that are in well defined nests guarded by the parent spider. Habits transitional to those of the *Polysphincta*-group are said to be present in extant ephialtine genera such as *Clistopyga* and *Zaglyptus*. These include attack on the guarding spider, sometimes before it has laid its eggs, and development on both adult and eggs, as well as consumption of spiderlings within the egg cocoon rather than the eggs themselves. These suppositions are based on somewhat limited observations, however.

Schizopyga seems sometimes to oviposit onto adult spiders but as far as is known other polysphinctine genera normally attack immatures, and most overwinter as small larvae on active spiders. Members of the *Polysphincta*-group are remarkable in being

the only Pimplinae known to allow the host some further development after being attacked, and also for the extreme specialisation of their larvae. In addition to ventral protuberances by means of which the larvae fix themselves to a caked saddle of their progressively accumulated exuviae on the integument of the host spider, in their final instars polysphinctine larvae develop more-or-less paired wart-like dorsal protuberances on several consecutive central body segments, each retractile and furnished with outwards-projecting hooks. These structures differ according to genus, and are used by the larva to grip the silk spun by the host as the parasitoid larva releases its hold on the host itself to finish its feeding, and then to move rather easily among strands of the host's silk as it constructs its cocoon. Final instar larvae of the ephialtine genera *Zaglyptus* and *Clistopyga* are furnished with broadly similar hook-bearing warts, although *Tromatobia*, which similarly feeds in spider egg cocoons but is arguably more primitive, has less elaborate structures bearing only unhooked spines. Fields of cuticular hooks forming holdfasts also occur in larvae of the genus *Sericopimpla*, which attack Psychidae (Lepidoptera). In all cases these structures seem to aid movement and orientation via the hosts silk during cocoon formation, albeit in slightly different ways. The cocoons of polysphinctines are highly specialised and those constructed exposed in the spider's web are dense and spindle shaped. Most have a clearly visible caudal opening through which the meconium is voided.

Larvae of species of the tribe Pimplini are endophagous. The egg is most often deposited inside a lepidopterous pupa and the host is normally inactivated soon after attack. In the case of *Pimpla*, at least, this is accomplished by the newly hatched larva, which quickly migrates to the host's brain; although selective egg placement and injected secretions from the female's accessory glands also play a part in overcoming the host's defences. Facultative hyperparasitism within lepidopterous pupae is fairly common in the Pimplini and some species of *Itoplectis* attack fully exposed ichneumonid and braconid cocoons as well (acting as pseudohyperparasites). Whether or not the larvae of these species feed endophagously in these circumstances does not seem to have been investigated.

Delomeristini

***Delomerista mandibularis* (Gravenhorst, 1829)**

DOWN: Rostrevor, ♂ September 1925, WFJ (Johnson, 1927: p. 159 as *Pimpla*); KILDARE: Kilkea Park, ♀ 26 June 1933, AWS (NMI) (det. AWS) (unpublished).

***Delomerista novita* (Cresson, 1870)**

DOWN: Rostrevor, ♀ 23 June 1925, WFJ (NMI) (det. MGF) (Fitton, Shaw and Gauld, 1988: p. 86; O'Connor, 2004b: p. 432); WICKLOW: no locality (Fitton, Shaw and Gauld, 1988: p. 86).

***Perithous divinator* (Rossius, 1790)**

ARMAGH: Poyntzpass, May, WFJ (Johnson, 1913: p. 140); CAVAN: no locality (Fitton, Shaw and Gauld, 1988: p. 87 one specimen seen); DUBLIN: St Anne's, Clontarf, ♀ 2 August 1924, EOM (NMI) (det. AES) (unpublished).

***Perithous scurra* (Panzer, 1804)**

synonym *Perithous mediator* (Fabricius, 1804)

ARMAGH: Poyntzpass, field, ♀ 7 July 1911, June, July, September, at hogweed *Heracleum*, in window, flying in sunshine at ivy *Hedera*, WFJ (NMI) (conf. MRS) (Johnson, 1912a: p. 78; Johnson, 1921a: p. 106 as *Perithous mediator*; Johnson, 1922b: p. 69 as *Perithous mediator*); CARLOW: Fenagh (NMI) (det. MRS as *Perithous mediator*); DOWN: Seaforde, ♀ 4 July 1989, MRB (UM); DUBLIN: Botanic gardens, ♂ 2 August 1981, JPOC (NMI) (det. MRS as *Perithous mediator*); Kenure Park (K. Pk), ♂ 26 June 1923, AWS (NMI) (det. AWS as *Perithous mediator*) (conf. MRS); GALWAY: Woodford, ♀ 24 August 1929, RAP (NMI) (det. AWS as *Perithous mediator*) (conf. MRS); TYRONE: Moy, ♂♀ 9-19 August 1983 (♀) laurel *Prunus laurocerasus*, ♂ 14 July 1985, MRB (UM); WEXFORD: Clone, ♀ 17 and 18 July 1927, AWS (NMI) (det. AWS as *Perithous mediator*) (conf. MRS); WICKLOW: Deputy's Pass, ♀ 19 July 1929, AWS (NMI) (det. AWS as *Perithous mediator*) (conf. MRS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 87; Alexander, 2000: p. 76).

***Perithous septemcinctorius* (Thunberg, 1824)**

synonym *Hybomischos varius* (Gravenhorst, 1829)

ARMAGH: Poyntzpass garden, September, on a myrtle *Luma* leaf, WFJ (Johnson, 1920: p. 9 as *Perithous varius*); KILDARE: no locality (Fitton, Shaw and Gauld, 1988: p. 88 as *Hybomischos*. One specimen seen); WEXFORD: Courtown, ♀ 1895, GHC (NMI) (det. MRS) (O'Connor and Butler, 1992: p. 164 as *Hybomischos*).

Ephialtini (including Polysphinctini)

***Acrodactyla degener* (Haliday, 1839)**

CORK: Fota, ♀ 5 September 1986, KGMB (UM) (det. MRB); TYRONE: Moy, ♀♀ 14 August 1983, 4 and 29 August 1984 and 24 September 1984 (UM) (det. MRB) (all unpublished).

Ireland (Haliday, 1839: p. 117 as *Pimpla*. In the same situations with the last (i.e. in shady groves) (♂ NMI); Morley, 1908a: p. 133; Fitton, Shaw and Gauld, 1988: p. 66 widely distributed throughout).

***Acrodactyla madida* (Haliday, 1839)**

Ireland (Broad, 2006).

***Acrodactyla quadrisculpta* (Gravenhorst, 1820)**

Avoca (Ovoca), ♀, AHH (NMI) (det. MRS) (O'Connor, 2004b: p. 431).

Ireland (Townes *et al*., 1965: p. 35; Fitton, Shaw and Gauld, 1988: p. 68 uncommon; widely distributed; Shaw, 2006: p. 230 its occurrence in Ireland now requires confirmation).

***Acropimpla didyma* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Murlough NNR, ♂ 19-22 October 1984, BHN (UM) (det. MRB and RN).

***Afrephialtes cicatricosus* (Ratzeburg, 1848)**

CORK (West): Glengarriff, ♂ emerged 23 June 1953, ex larva of a welsh clearwing *Synanthedon formicaeformis* (Esper) (Lepidoptera: Sesiidae) in willow *Salix* twigs, collected April 1953, ESAB (NMI); Glengarriff district, ♀ emerged 9 June 1954, ex *S. formicaeformis*, ESAB (NMI) (both O'Connor and Shaw, 2004: p. 119).

Ireland (Shaw, 2006: p. 220).

***Clistopyga incitator* (Fabricius, 1793)**

ARMAGH: Poyntzpass, ♀ 12 July 1910, WFJ (Johnson, 1912a: p. 78); same locality, June 1916, in garden, WFJ (Johnson, 1917a: p. 39); Poyntzpass hill, July, WFJ (Johnson, 1920a: p. 9); DONEGAL: Portnoo, June, on roadsides, WFJ (Johnson, 1919a: p. 36); Portnoo shore and mountain road, ♂ June, WFJ (NMI) (conf. MRS) (Johnson, 1920a: p. 9 there was quite a number); DOWN: Rostrevor, 26 June 1929, grass plot, 7 and 8 August 1929, field opposite, 7 September 1929, in house, WFJ (NMI) (conf. MRS) (Johnson, 1930: p. 157); DUBLIN: Mayfield, Harold's Cross, ♂ 10 June 1929, AWS (NMI) (det. AWS, conf. MRS); Lambay, ♀ June 1906 (NMI) (det. MRS); KERRY: Flesk, Killarney, ♀ August 1935, EFB (NMI) (det. AWS, conf. MRS) (all unpublished); LOUTH: Termonfeckin, ♀ August 1924, WFJ (Johnson, 1927: p. 159); MAYO: Clare Island, 2♀♀ June 1911, WFJ (NMI) (conf. MRS); near Westport, ♀ June 1909, JNH (NMI) (conf. MRS) (Morley, 1911a: p. 12); TYRONE: Moy, ♂♂♀♀ 24-30 June 1985, hawthorn *Crataegus*, herbaceous verge and 23 July 1985 (♂♂), 17-28 June 1985, 1-7 July 1985 (♀♀), all Malaise trap, MRB and RN (UM) (det. MRB and RN); WICKLOW: Greystones, ♀ 29 August 1927, AWS (NMI) (det. AWS, conf. MRS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 60 common and widely distributed throughout).

***Dolichomitus agnoscendus* (Roman, 1939)**

DOWN: no locality {Tollymore Park, ♀ 25 June 1961, AWS (NMI)}; KERRY: no locality (both Fitton, Shaw and Gauld, 1988: p. 38); WICKLOW: Clara, ♀ 22 May 1954, AWS (NMI) (unpublished).

Ireland (Alexander, 2000: p. 75).

****Dolichomitus imperator* (Kriechbaumer, 1854)** **New to Ireland**

DOWN: Rostrevor, ♂ 14 June 1974, oak *Quercus* woodland, RN (UM) (det. JPB).

***Dolichomitus pterelas* (Say, 1829)**

KERRY: no locality {♀ 19 July 1932, Donovan sisters (NMI)} (Fitton, Shaw and Gauld, 1988: p. 40; Alexander, 2000: p. 75).

***Dolichomitus tuberculatus* (Geoffroy, 1785)**

ARMAGH: Poyntzpass, WFJ (Johnson, 1907: p. 246 as *Cryptus*); CORK: Glengariff, ♀ 13 July 1924, JNH (NMI) (det. AWS and MRS); Ummera, ♀ 1934, Donovan sisters (NMI) (det AWS and MRS); DONEGAL: no locality, ♀ 14 July 1899 (NMI) (det. MRS) (all unpublished); DOWN: Newcastle, ♀♀ 25 May 1927, 9 and 11 June 1927 (NMI) (Johnson, 1927: p. 159 as *Ephialtes*. ♀; Johnson, 1929: p. 136 as *Ephialtes*); Rostrevor, June 1924 and September 1925, in woods, WFJ (NMI) (Johnson, 1927: p. 159 as *Ephialtes*. ♀); same locality, ♂♂ 20, 27 and 29 May 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157 as *Ephialtes*); KERRY: Blackstones, ♀ 4 July 1934, AWS (NMI) (unpublished); WATERFORD: Stradbally, ♀ 22-30 June 1907, HWA (Morley, 1908b: p. 276 as *Ephialtes*); WICKLOW: Devil's Glen, ♂ 23 June 1929, AWS (NMI) (unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 40 uncommon but widely distributed; Alexander, 2000: p. 75).

***Dreisbachia pictifrons* (Thomson, 1877)**

ARMAGH: Peatlands, ♀ 13 August 1985, cut over bog, MRB (UM) (det. MRB and RN); CORK: Fota, ♀ 13 September 1986, KGB (UM); DOWN: Tollymore, ♀ 21 August 1984, MRB (UM) (det. MRB) (all unpublished); WICKLOW: Glen of the Downs, ♀ 12 August 1937, BPB (NMI) (det. MRS) (Fitton, Shaw and Gauld, 1988: p. 62; O'Connor, 2004b: p. 432).

Ireland (no locality, ♀, AHH (NMI) (det. MRS) (O'Connor, 2004b: p. 432)).

***Endromopoda arundinator* (Fabricius, 1804)**

synonym *Endromopoda melanopyga* (Gravenhorst, 1829)

CARLOW: Oak Park, ♀ 3 July 1940, AWS (NMI) (det. AWS as *Endromopoda melanopyga*); KILDARE: Newbridge Fen, ♀11 July 1982, JMOC (NMI) (det. MRS); WESTMEATH: Ballnafid Lake, ♂ 22 June 1989, JPOC (NMI) (det. MRS) (all unpublished); WICKLOW: no locality {Holdenstown Bog}, ♀ 9 August 1953, AWS (NMI) (det. AWS); Killoughter, ♀ 11 June 1953, AWS (NMI) (det. AWS as *Endromopoda melanopyga*)} (Fitton, Shaw and Gauld, 1988: p. 46).

Ireland (Aubert, 1969: p. 26 as *Scambus*).

***Endromopoda detrita* (Holmgren, 1860)**

synonym *Endromopoda brunnea* (Brischke, 1880)

ANTRIM: Rea's Wood, ♀ 25 September 1984, MRB and RN (UM) (det. MRB and RN) (unpublished); ARMAGH: Poyntzpass, October, on the wing, WFJ (NMI) (Johnson, 1913: p. 140 as *Pimpla*); DONEGAL: Coolmore, September, at flowers of Umbelliferae, WFJ (Johnson, 1916a: p. 20 as *Pimpla*); Glebe House, ♀ 25 September 1989, MRB (UM); DOWN: Rostrevor, ♀ 17 May 1929, woods, WFJ (NMI) (det. MRS); DUBLIN: Bull Island, ♂♀ 9 May 1982, swept in the alder *Alnus glutinosa* marsh, JMOC (NMI) (det. MRS); Slade of Saggart, ♀ 18 July 1982, JMOC (NMI) (det. MRS); GALWAY: Kylemore, ♀25 July 1982, swept amongst mixed trees beside the river, JMOC (NMI) (det. MRS); KERRY: Killarney, ♀ August 1923, EFB (NMI) (det. MRS); Muckross, ♀ 2 August 1937, BPB (NMI) (det. MRS); Rossbeigh, HD (Morley, 1908a: p. 89 as *Pimpla*); Tomies Wood, ♀ 15 September 1981, JPOC (NMI) (det. MRS); WESTMEATH: N'thlow (Newtownlow), ♀ 12 May 1929, AWS (NMI) (det. AWS as *Pimpla brunnea*); ROSCOMMON: Castlerea, ♀ 28 July 1982, swept in mixed wood, JMOC (NMI) (det. MRS); WEXFORD: near Coolgreany, ♀♀ 22 July 1927, AWS (NMI) (det. AWS and MRS); WICKLOW: Arklow district, ♂ 2 August 1925, AWS (NMI) (det. AWS); Kilmacanogue, ♀15 August 1982, JMOC (NMI) (det. MRS); Rathdrum, ♀ 12 August 1926, AWS (NMI) (det. AWS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 46 generally common and widespread infertile grassy habitats throughout the British Isles).]

[*Endromopoda nigricoxis* (Ulbricht, 1910)

ANTRIM: Rea's Wood, 2♀♀ 22 May 1985 and 30 May-2 June 1985, MRB and RN (UM) (det. MRB and RN); TYRONE: Moy, 2 ♀♀ 2 June 1985, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB and RN) (both unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 47 uncommon, but widely distributed in grassland habitats throughout the British Isles).

Ireland (Broad, 2006).]

[*Ephialtes* ?*inanis* (Schrank, 1802)

WEXFORD: Enniscorthy, AB (Morley, 1908a: p. 86 as *Pimpla inanis*).]

***Ephialtes manifestator* (Linnaeus, 1758)**

synonym *Ephialtes carbonarius* (Christ, 1791) preoccupied

ARMAGH: Poyntzpass, June, on window, WFJ (Johnson, 1922b: p. 69 as *Ephialtes carbonarius*); CLARE: Corofin, ♀ 24 April 1973, road through deciduous woodland /verge, RN (UM) (det. MRB) (unpublished); KERRY: no locality (Fitton, Shaw and Gauld, 1988: p. 35; Alexander, 2000: p. 75).

***Exeristes ruficollis* (Gravenhorst, 1829)**

WEXFORD: Courtown (Courten), early September 1893, AB (Morley, 1908a: p. 59).

***Gregopimpla inquisitor* (Scopoli, 1763)**

CARLOW: Carriglead, ♂♀ 15 May 1935, beaten off beech *Fagus* tree in cop., AWS (NMI) (det. AWS) (unpublished); MAYO: Clare Island, ♀ June 1911, WFJ (Morley, 1911a: p. 12 as *Pimpla*).

***Iseropus stercorator* (Fabricius, 1793)**

CAVAN: Virginia, ♂ 20 May 1982, alder *Alnus* fen, JMOC (NMI) (det. MRS) (O'Connor, 2004b: p. 432).

Ireland (Fitton, Shaw and Gauld, 1988: p. 56).

***Liotryphon ascaniae* (Rudow, 1883)**

synonym *Liotryphon ruficollis* (Desvignes, 1856)

ARMAGH: Poyntzpass, May, field, WFJ (Johnson, 1919a: p. 36 as *Pimpla ruficollis*).

***Liotryphon crassiseta* (Thomson, 1877)**

ARMAGH: Poyntzpass, ♀ June 1921, WFJ (NMI) (det. MRS) (unpublished); CORK: no locality {Monkstown, ♀ (NMI)}; KERRY: no locality (Fitton, Shaw and Gauld, 1988: p. 42); KILDARE: Emo, ♂15 May 1949, AWS (NMI) (det. JFP) (unpublished).

***Megaetaira madida* (Haliday, 1839)**

MAYO: Achill Sound, ♂ June 1910, WFJ (NMI) (det. JFP and conf. MRS) (O'Connor, 2004b: p. 431 as *Acrodactyla*).

Ireland (Haliday, 1839: p. 117 as *Pimpla*. In shady groves (♂♂♀♀, NMI); Morley, 1908a: p. 132; Fitton, Shaw and Gauld, 1988: p. 67 uncommon but widely

distributed).

***Polysphincta rufipes* Gravenhorst, 1829**

Ireland (Fitton, Shaw and Gauld, 1988: p. 65).

***Polysphincta tuberosa tuberosa* Gravenhorst, 1829**

TYRONE: Moy, ♀ 22-28 October 1984 and 29 August 1983, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB) (unpublished).

Ireland (Jussila, 1965: p. 25).

***Polysphincta vexator* Fitton, Shaw and Gauld, 1988**

WICKLOW: Kilmacanoge, ♀ 15 August 1982, swept in a small wooded marsh along a stream, JMOC (NMI) (det. MGF) (O'Connor and Butler, 1992: p. 164).

Ireland (Shaw, 2006: p. 227).

***Scambus annulatus* (Kiss, 1924)**

CARLOW: Thomastown, ♀, (NMI) (det. MRS); DUBLIN: Portmarnock, ♀ 23 September 1928, JNH (NMI) (det. IDG); Seapoint, ♀ emerged 16 December 1939, bred from *Gracilaria syringella* (now *Caloptilia syringella* (Fabricius)) (Lepidoptera: Gracillariidae) on privet *Ligustrum*, BPB (NMI) (det. MRS); WICKLOW: Lough Dan, 28 September 1909 (NMI) (det. MRS) (O'Connor, 2004b: p. 433).

Ireland (Fitton, Shaw and Gauld, 1988: p. 50 common, widely distributed in the British Isles).]

***Scambus brevicornis* (Gravenhorst, 1829)**

synonym *Pimpla punctiventris* Thomson, 1877

synonym *Pimpla nigriscaposa* Thomson, 1877

synonym *Scambus anomalus* (Morley, 1906)

ANTRIM: Killead, August 1923, WFJ (Johnson, 1927: p. 159 as *Pimpla*. ♂♀); Rea's Wood, ♀ 30 May 1973, AGI (UM) (det. MRB and RN) (unpublished); ARMAGH: Poyntzpass, ♀ 30 July 1909, ♂ 30 August 1909, WFJ (Morley, 1911b: p. 126 as *Phthorimus anomalus*; Johnson, 1912a: p. 78 as *Pimpla*; Johnson, 1912a: p. 79 as *Phthorimus anomalus*); CAVAN: Long Hill, Cleggy, ♀ 29 July 1933, RCF (NMI); CLARE: Lough Atorick, ♀ June 1921, JNH (NMI) (both unpublished); DONEGAL:

Coolmore, ♀♀ September, among sallows *Salix*, WFJ (NMI) (Johnson, 1913: p. 140 as *Pimpla*; Johnson, 1917a: p. 39 as *Pimpla*); same locality, September, on roadside, among herbage, WFJ (Johnson, 1915: p. 132 as *Pimpla punctiventris*; Johnson, 1917a: p. 39 as *Pimpla punctiventris*); same locality, September, at wild carrot *Daucus carota*, not common, WFJ (Johnson, 1916a: p. 20 as *Pimpla punctiventris*); Portnoo, ♀♀ September 1917, among herbage, WFJ (NMI) (Johnson, 1918: p. 108 as *Pimpla*; Johnson, 1919a: p. 36 as *Pimpla punctiventris*); DOWN: Dromore, August 1925, WFJ (Johnson, 1927: p. 159 as *Pimpla*. ♂♀); Greencastle, ♂♀ 24 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as *Pimpla brevicornis* var. *nigriscaposa* Thomson); Newcastle, ♀ August 1926, var. *nigriscaposa*, WFJ (NMI) (Johnson, 1927: p. 159 as *Pimpla*. ♂♀); same locality, ♀ 16 September, WFJ (NMI) (Johnson, 1929: p. 136 as *Pimpla nigriscaposa*); same locality, ♂♀ 9, 11 and 29 September (NMI), WFJ (Johnson, 1929: p. 136); Rostrevor, ♀♀ September 1923 (NMI), also var. *nigriscaposa*, WFJ (Johnson, 1927: p. 159 as *Pimpla*. ♂♀); Rostrevor, Victoria Square, ♀ 6 September 1929, WFJ (Johnson, 1930: p. 157 as *Pimpla nigriscaposa*); Rostrevor, ♀ 19 July 1975, oak *Quercus* woodland, RN (UM) (unpublished); DUBLIN: Howth, ♀18 April 1924, EOM (NMI); North Bull, ♀♀ 18 September 1926, EOM (NMI); North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (Speight and Healy, 1977: p. 153 as *Ephialtes*); Rogerstown, ♀ 19 August 1923, AWS (NMI); Rush, ♀ 19 August 1923, AWS (NMI) (both unpublished); GALWAY: Clonbur, ♀, RFS(NMI); LAOIS: The Derries, ♀20 September 1982, mixed wood, JPOC (NMI); LONGFORD: Sixtowns, ♀ July 1930, GB (NMI) (all unpublished); LOUTH: Termonfeckin, ♀ August 1924, also var *nigriscaposa*, WFJ (NMI) (Johnson, 1927: p. 159 as *Pimpla*. ♂♀); MAYO: Castlebar, ♀ July 1911, JNH (NMI) (unpublished); Clare Island, ♀♀, 1910 (NMI) and 1911 (NMI), WFJ; Knappagh near Westport, PEG; Polranny, WFJ (NMI) (Morley, 1911a: p. 12 as *Pimpla*); TYRONE: Moy, ♂2♀♀ 2 June 1985 and ♂ 23 July 1983, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB); WATERFORD: Cappoquin, ♀♀ 15 August 1928, AWS (NMI) (unpublished); WEXFORD: Kilmore, AB (Morley, 1908a: p. 75 as *Pimpla*);

WICKLOW: Clara, ♀ 22 May 1954, AWS (NMI); Maherabeg, ♀ 1 July 1927, AWS (NMI); Rathdrum, ♀ 4 August 1925, AWS (NMI) (all unpublished). (There is a very large series of this species in NMI and only a representative sample is indicated above).

Ireland (Fitton, Shaw and Gauld, 1988: p. 52 widely distributed and common throughout the British Isles).

***Scambus calobatus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, 9 October 1909, WFJ (Johnson, 1912a: p. 78 as *Pimpla*); DONEGAL: Portnoo, September 1917, at flowers of wild carrot *Daucus carota*, WFJ (Johnson, 1918: p. 108 as *Pimpla*); DOWN: Dromore, ♂ August 1925, WFJ; DUBLIN: Howth, bred from some lepidopteron in thistle *Carduus* stems (Morley, 1908a: p. 84); LOUTH: Termonfeckin, ♀ August 1924, with abdomen strongly compressed, WFJ (both Johnson, 1927: p. 159 as *Pimpla*).

***Scambus elegans* (Woldstedt, 1876)**

ARMAGH: Poyntzpass, ♀ 15 May 1911, ♀ 6 and ♀ 10 May 1919, WFJ (NMI) (det. MRS); DUBLIN: Shankill, ♀ 1 August 1930, AAL (NMI) (det. MRS); KERRY: Killarney, ♀, EFB (NMI) (det. MRS); KILDARE: Skerries Bog, ♂♂♀ 3 October 1946, AWS (NMI); TYRONE: Moy, ♀ 15 April 1983, hawthorn *Crataegus*, herbaceous verge, MRB (UM) (det. MRB); WATERFORD: Dunmore East, ♀ 26 June 1983, JPOC (NMI) (det. MRS) (O'Connor, 2004b: p. 433).

Ireland (Fitton, Shaw and Gauld, 1988: p. 53).

***Scambus inanis* (Schrank, 1802)**

Ireland (Broad, 2006).

***Scambus eucosmidarum* (Perkins, 1957)**

WEXFORD: Ballyteige (S9504), ♀ 12 June1982, swept on sand-dunes, JMOC (NMI) (det. IDG) (O'Connor and Butler, 1992: p. 164).

Ireland (Shaw, 2006: p. 221).

***Scambus nigricans* (Thomson, 1877)**

synonym *Scambus similis* (Bridgman, 1884)

synonym *Scambus robustus* (Morley, 1908)

synonym *Pimpla habermehli* Schmiedeknecht, 1908

ANTRIM: Killead, ♀ August 1923, WFJ (NMI) (det. MRS); ARMAGH: Poyntzpass, ♀ 27 July 1918, WFJ (NMI) (det. MRS) (both unpublished); Rea's Wood, ♀ 4 June 1985, MRB (UM) (det. MRB and RN); DONEGAL: Coolmore, September, on roadside, rare, WFJ (Johnson, 1914a: p. 65 as *Pimpla similis*); same locality, ♀ 16 September 1915, among sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 20 as *Pimpla robusta*); DOWN: Greencastle, ♀ 21 August 1930, roadside, Mrs Johnson (Johnson, 1931c: p. 140 as *Pimpla habermehli*); Rostrevor, ♀ 1 September 1930, WFJ (NMI) (det. MRS); KERRY: Gap of Dunloe, ♀♀ 29 August 1925, JNH (NMI) (det. MRS) (both unpublished); Rossbeigh, ♀ June 1902, HD (Morley, 1908a: p. 65 as *Pimpla similis*); KILDARE: Newbridge Fen (N7616), ♀ 11 July 1982, JMOC (NMI) (det. MRS); LAOIS: Abbeyleix, 27 August 1925, RAP (NMI) (det. MRS); LOUTH: Termonfeckin, ♀ 1 September 1924, WFJ (NMI) (det. MRS); TIPPERARY: Clonmel, ♀ 16 June1925, AWS (NMI) (det MRS); TYRONE: Moy, ♀ 9-19 August 1983 Malaise, MRB and RN (UM) (det. MRB); WEXFORD: near Coolgreany, ♀ 22 July 1927, AWS (NMI) (det. MRS); Duncannon, ♀ 11 June 1982, new pasture, JMOC (NMI) (det. MRS); WICKLOW: Altidore, ♀ 26 June 1929, AWS (NMI) (det. MRS); Arklow District, ♀ 28 August 1925, AWS (NMI) (det. MRS); Ballyhenry, ♀ 29 August 1926, AWS (NMI) (det MRS); Magherabeg, ♀ 1 July 1927, AWS (NMI) (det MRS); Rathdrum, ♀ 13 August 1925, AWS (NMI) (det. MRS) (all unpublished). (There is a very long series in NMI and only a representative sample is included above).

Ireland (Fitton, Shaw and Gauld, 1988: p. 54 common, widely distributed in the British Isles).]

***Scambus planatus* (Hartig, 1838)**

synonym *Scambus nucum* (Ratzeburg, 1844)

synonym *Pimpla ventricosa* Tschek, 1871

ARMAGH: Poyntzpass, ♀ 30 May, WFJ (NMI) (det. MRS) (unpublished);

DONEGAL: Coolmore, ♂♂♀♀, on the sandhills at thistles *Carduus*, WFJ (Johnson, 1915: p. 131 as *Pimpla ventricosa*. One female had the areolet pentagonal); MAYO: Castlebar, ♀ July 1911, JNH (Morley, 1911a: p. 12 as *Pimpla nucum*); WICKLOW: Deputy's Pass, 3♂♂♀ 8 May 1932, AWS (NMI) (det. as *Pimpla nucum,* JFP) (unpublished).

***Scambus pomorum* (Ratzeburg, 1848)**

ARMAGH: Poyntzpass, May, flying over gorse *Ulex* bushes in field, WFJ (NMI) (Johnson, 1920a: p. 9 as *Pimpla*); DOWN: Rostrevor, ♀ May 1926, WFJ (Johnson, 1927: p. 159 as *Pimpla*); Murlough NNR, ♀ 16-22 October (sic) 1984, BHN (UM) (det. MRB and RN); DUBLIN: Kilbarrack, ♀ 23 May 1939, EOM (NMI) (det. MRS) (unpublished); FERMANAGH: Legalough, ♀ 2 July 1985 MRB and RN (UM) (det. MRB); KILDARE: Grand Canal (N9326), ♀ 23 May 1982, JMOC (NMI) (det. MRS) (unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 55 uncommon but widely distributed in the British Isles).

***Scambus sagax* Hartig, 1838**

DOWN: Rostrevor, ♂ September 1925, WFJ (Johnson, 1927: p. 159 as *Pimpla*).

***Scambus vesicarius* (Ratzeburg, 1844)**

DUBLIN: Ashtown, near the Royal Canal, reared from the galls of the sawfly *Pontania proxima* (Lepeletier) (Hymenoptera: Tenthredinidae) (AL-Saffar and Aldrich, 1997: pp 220-221); WICKLOW: Coan, ♀ 28 June 1931, AWS (NMI) (det. JFP); Deputy's Pass, ♂ 11 September 1932, AWS (NMI) (det. JFP) (both unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 55 uncommon; widely distributed in the British Isles; Yu, 1998: CD-Rom; Shaw, 2006).

***Schizopyga circulator* (Panzer, 1801)**

DONEGAL: Coolmore, among sallows *Salix*, WFJ (Johnson, 1915: p. 132).

Ireland (Fitton, Shaw and Gauld, 1988: p. 63 widely distributed).

***Schizopyga frigida* Cresson, 1870**

DOWN: no locality (Fitton, Shaw and Gauld, 1988: p. 63); MAYO: Clare Island, ♂ June 1911, WFJ (Morley, 1911a: p. 12 as *Schizopyga*); TIPPERARY: no locality (Fitton, Shaw and Gauld, 1988: p. 63).

***Schizopyga podagrica* Gravenhorst, 1829**

ARMAGH: Poyntzpass, June, August, on hill and in field, at hogweed *Heracleum*, WFJ (Johnson, 1915: p. 132 as *Exochus*; Johnson, 1917a: p. 39 as *Exochus*; Johnson, 1922b: p. 69 as *Exochus*); KERRY (South): Rossbeigh, June 1902, AD (Saunders *et al*., 1903: p. 68; Morley, 1908a: p. 135).

***Schizopyga varipes* Holmgren, 1856**

LAOIS: Derry Hills, 2♂♂2♀♀ reared spring 1999 from trap-nests (*Rubus idaeus* stems) placed the previous summer in oak *Quercus* trees at the edge of a raised bog, COR (NMI and NMS) (Shaw, 2006: p. 226).

Ireland (Shaw, 2006: p. 226 a further male from trap nest in 1999/2000 but without unquestionable locality data).

***Sinarachna pallipes* (Holmgren, 1860)**

WICKLOW: Powerscourt Deerpark (Dpt), ♀ 10 September 1930, AWS (NMI) (det. AWS and conf. JPOC) (O'Connor, 2004c: p. 296).

****Townesia tenuiventris* (Holmgren, 1860)** **New to Ireland**

WICKLOW: Ballyarthur, ♀ 25 August 1925, AWS (NMI) (det AWS and conf. JPOC); Clara, ♂ 19 May 1929, AWS (NMI) (det. AWS, conf. AR and JPOC).

***Tromatobia lineatoria* (Villers, 1789)**

synonym *Tromatobia oculatoria* (Fabricius, 1798) misidentification

ANTRIM: Rea's Wood ♂♀ 25 September 1984, ♂ 4 June 1985, MRB (UM) (det. MRB and RN as *Tromatobia oculatoria*); ARMAGH: Poyntzpass, ♀ 24 April 1907, July, August (NMI), on gorse *Ulex*, fields, WFJ (Johnson, 1907: p. 246 as *Pimpla oculatoria*; Morley, 1907b: p. 160 as *Pimpla oculatoria*; Johnson, 1922b: p. 69 as *Pimpla oculatoria*); DUBLIN: Boher-na-breena, ♀ 7 July 1923, AWS (NMI) (det. MRS as *Tromatobia oculatoria*); Sutton, ♀ 3 July 1938, EOM (NMI) (det MRS as *Tromatobia oculatoria*) (both unpublished); DOWN: Dunmurry, ♂ 15 September

1984, RN (UM); Murlough NNR, 3♀♀ 9-15 and 23-29 October 1984, all Malaise traps, BHN (UM) (det. MRB and RN as *Tromatobia oculatoria*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Pimpla oculatoria*); TYRONE: Moy, ♂♂♀♀ 11 and 25 September 1983, 20 November 1983, 25 May 1985, 23 October 1985, all Malaise traps, MRB and RN (UM) (det. MRB and RN as *Tromatobia oculatoria*); WICKLOW: Deputy's Pass, ♂ 18 August 1925 and ♀ 24 July 1929, AWS (NMI) (det. MRS as *Tromatobia oculatoria*); Powerscourt, ♂ 27 September 1929, AWS (NMI) (det. MRS as *Tromatobia oculatoria*); Rathdrum, ♂ 8 July 1926, ♀ 12 June 1927 and ♀♀ 13 July 1929, AWS (NMI) (det. MRS as *Tromatobia oculatoria*) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 58 as *Tromatobia oculatoria*. Common throughout).

***Tromatobia ornata* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Murlough NNR, 2-9 October 1984, Malaise trap, BHN (UM) (det. MRB and RN).

***Tromatobia ovivora* (Boheman, 1821)**

ARMAGH: Poyntzpass, ♀ 12 June 1917, on wing at a plant of black bryony *Tamus communis*, WFJ (NMI) (conf. MRS) (Johnson, 1918: p. 108 as *Pimpla*); DOWN: Rostrevor, ♀ 21 October 1929, roadside on blade of grass, WFJ (Johnson, 1930: p. 157 as *Pimpla*); LAOIS: Emo, ♀ 27 June 1979, cut over valley bog invaded by willow *Salix* - birch *Betula* scrub, D. N. Dowling (NMI) (det. MGF) (unpublished); MAYO: Achill Sound, ♀ June 1911, WFJ (Morley, 1911a: p. 12 as *Pimpla*); WICKLOW: Clara, ♂ 27 May 1934, AWS (NMI) (det. JFP) (unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 58 uncommon but widespread).

***Tromatobia variabilis* (Holmgren, 1856)**

synonym *Tromatobia hibernica* (Morley, 1908)

CORK: Youghal, ♀3 August 1933, salt marsh, JNH (NMI) (det. MRS) (unpublished); KERRY: Kemmare, ♀ (type) 30 June 1901, JWY (BMNH) (Morley, 1908a: p.61 as *Pimpla hibernica*; Fitton, 1976: p.344 as *Pimpla hibernica*. Kenmore. Paralectotypes

4♂♂♀ and ♀; Fitton, Shaw and Gauld, 1988: p. 58); Kildare: no locality {Louisa Bridge, ♀ 22 August 1982, swept in marsh, JMOC (NMI) (det. MRS)} (Fitton, Shaw and Gauld, 1988: p. 58); WEXFORD: Kilmore, 4♂♂2♀♀ (types) 11 and 23 August 1898, AB (BMNH) (Morley, 1908a: p. 61 as *Pimpla hibernica*; Fitton, 1976: p. 344 as *Pimpla hibernica*. Lectotype ♀; Fitton, Shaw and Gauld, 1988: p. 58).

***Zaglyptus multicolor* (Gravenhorst, 1829)**

DUBLIN: Shankill, ♀ 5 September 1929, AAL (NMI) (det. AWS and conf. JPOC) (O'Connor, 2004b: p. 433).

***Zaglyptus varipes* (Gravenhorst, 1829)**

WATERFORD: Lismore, Dungarvan, ♂ 15 August 1928, AWS (NMI) (det. MRS) (O'Connor, 2004b: p. 434).

Ireland (Fitton, Shaw and Gauld, 1988: p. 59).

***Zatypota discolor* (Holmgren, 1860)**

WICKLOW: Glencree, ♂ 27 September 1931, AWS (NMI) (det. AWS and conf. JPOC) (O'Connor, 2004c: p. 296).

***Zatypota percontatoria* (Müller, 1776)**

MAYO: Achill, ♂ June 1911, WFJ (Morley, 1911a: p. 12 as *Polysphincta*); WICKLOW: Devil's Glen, ♀ 29 September 1954, AWS (NMI) (det. AWS and conf. JPOC) (unpublished).

Ireland (Morley, 1908a: p. 130 as *Polysphincta*. Haliday indicates no locality for this species, which he probably found in Ireland).

Pimplini

***Apechthis compunctor* (Linnaeus, 1758)**

synonym *Pimpla brassicariae* (Poda, 1761)

DOWN: Newcastle, ♂♀ 5 September, WFJ (Johnson, 1929: p. 136 as *Pimpla brassicariae*).

***Apechthis quadridentata* (Thomson, 1877)**

synonym *Apechthis resinator* Thunberg, 1822 misidentication

ANTRIM: Rea's Wood, ♂ 29 May 1984, MRB and RN; DOWN: Newcastle, ♀ 5

September 1927, WFJ (NMI) (det. MRS) (both unpublished); Rostrevor, ♂ 17 May 1929, woods, WFJ (NMI) (conf. MRS) (Johnson, 1930: p. 157 as *Pimpla resinator*); Murlough NNR, ♀♀ 9-15 and 23-29 October 1984, various other dates in October (all Malaise traps), BHN (UM) (det. MRB and RN); Seaforde, ♀ 1 October 1989, MRB (UM); Tollymore, ♀ 21 August 1984, MRB (UM); DUBLIN: Boher-na-Breena, ♂ 25 May 1927, AWS (NMI) (det. MRS); Slade of Saggart, ♀ 18 July 1982, JMOC (NMI) (det. MRS); LAOIS: The Derries, ♀ 20 September 1982, mixed wood, JPOC (NMI) (det. MRS); TYRONE: ♀ Moy 7 October 1984 and 2 June 1985, BRB and RN (UM) (det. MRB and RN); WEXFORD: Curracloe (T1127), ♀ 9 June 1982, marsh, JPOC (NMI) (det. MRS); WICKLOW: Deputy's Pass, ♂ 31 July 1929, AWS (NMI) (det. MRS); Glencree, ♂ 8 September 1929 and ♂ 15 September 1929, AWS (NMI) (det. MRS); Powerscourt, ♂♂♀ 27 September 1929, AWS (NMI) (det. MRS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 84).

***Apechthis rufata* (Gmelin, 1790)**

DOWN: Rostrevor, ♂ 7 May 1923, WFJ (NMI) (det. MRS) (Fitton, Shaw and Gauld, 1988: p. 84; O'Connor, 2004b: p. 431); WICKLOW: Glencree, ♀ 4 September 1924, AWS (NMI) (det. MRS) (O'Connor, 2004b: p. 431).

***Itoplectis alternans* (Gravenhorst, 1829)**

DONEGAL: Coolmore, September, among sallows *Salix*, WFJ (NMI) (conf. MRS) (Johnson, 1916a: p. 20 as *Pimpla*); Portnoo, September 1917, WFJ (Johnson, 1918: p. 108 as *Pimpla*); DOWN: Greencastle, ♂ August 1930, shore, WFJ (NMI) (Johnson, 1931c: p. 140 as *Pimpla*); DUBLIN: Upper Glenasmole, ♂ 15 July 1928, AWS (NMI) (det. JFP); MAYO: Clare Island, ♂ June 1911, WFJ (NMI) (det. MRS); WICKLOW: Glenasmole, ♀ 20 May 1929, JAJP (NMI) (det. AWS and conf. MRS) (all unpublished).

***Itoplectis clavicornis* (Thomson, 1889)**

DUBLIN: Kenure Park, Rush, ♀ 26 June 1922, AWS (Stelfox, 1929a: pp 17-18; Fitton, Shaw and Gauld, 1988: p. 73); WICKLOW: Devil's Glens, ♀ May 1927, bred

from a cocoon of a *Phobocampa confusa* Thomson (Hymenoptera: Ichneumonidae) taken during the previous July, AWS (Stelfox, 1929a: pp 17-18; Fitton, Shaw and Gauld, 1988: p. 73); same locality, ♀ 16 June 1940, AWS (NMI) (det. AWS) (unpublished); Rathdrum, ♂ 12 June 1927, taken among nettles *Urtica*, AWS; Kilmacanoge, near Bray, ♂ bred from cocoon of *Macrocentrus abdominalis* (Fabr.) (Hymenoptera: Braconidae), AAL (Stelfox, 1929a: pp 17-18; Perkins, 1941: p. 647; Fitton, Shaw and Gauld, 1988: p. 73).

***Itoplectis maculator* (Fabricius, 1775)**

ARMAGH: Poyntzpass, June, July, at hogweed *Heracleum* in fields, WFJ (NMI) (Johnson, 1915: p. 132 as *Pimpla*; Johnson, 1917a: p. 39 as *Pimpla*; Johnson, 1921a: p. 106 as *Pimpla*); Poyntzpass garden, May, WFJ (Johnson, 1920a: p. 9 as *Pimpla*); Poyntzpass, Acton Wood, April, WFJ (Johnson, 1919a: p. 36); CARLOW: Cloughristick, ♀ 19 June 1982, JMOC (NMI) (det. MRS); CLARE: Moy House (Ho.), Lahinch, ♀ 19 July 1924 AWS (NMI) (det. AWS) (both unpublished); DONEGAL: Portnoo, September, cliff, WFJ (Johnson, 1919a: p. 36 a var. with abdomen entirely black); DOWN: Newcastle, ♀♀ 7 and 25 May, 25 August, 15 October, WFJ (NMI) (Johnson, 1929: p. 136 as *Pimpla*); Rostrevor, ♀ May 1923, WFJ (NMI) (Johnson, 1927: p. 159 as *Pimpla*); same locality, ♀ 8 July, WFJ (Johnson, 1929: p. 136 as *Pimpla*); Warrenpoint, ♀ 2 and 20 June, 24 August, WFJ (NMI) (Johnson, 1929: p. 136 as *Pimpla*); DUBLIN: Ireland's Isle, ♀ 30 July 1926, AWS (NMI) (det. AWS, conf. MRS); Skerries, ♂ 8 August 1926, AWS (NMI) (det. AWS, conf. MRS); KERRY: Killarney, ♀ 15 October 1922, EFB (NMI) (det. AWS, conf. MRS) (all unpublished); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Pimpla*); Dundalk, ♀ 14 July, WFJ (NMI) (Johnson, 1929: p. 136 as *Pimpla*); MAYO: Brackloon Wood, ♂ 4 August, PEG (Morley, 1911a: p. 12 as *Pimpla*); TYRONE: Moy, ♀♀ 4 June 1985, 14 July 1985, 24 September 1985, Malaise trap, MRB and RN (UM) (det. MRB and RN); WICKLOW: Arklow District, ♀♀ 11 June 1926 and 3 July 1926, AWS (NMI) (det. MRS); Rathdrum, ♂ 27 July 1929, AWS (NMI) (det. AWS, conf. MRS) (both unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 73 very common, distributed throughout).

***Pimpla arctica* Zetterstedt, 1838**

DONEGAL: Portnoo, September 1917, at wild carrot *Daucus carota*, WFJ (Johnson, 1918: p. 108); DOWN: Dundrum, ♀ June 1926, WFJ (Johnson, 1927: p. 159); FERMANAGH: Tempo, May, WFJ (Johnson, 1919a: p. 36); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17).

***Pimpla contemplator* (Müller, 1776)**

ARMAGH: Poyntzpass, ♀♀ 2 August 1912, WFJ (NMI) (det. MRS); DUBLIN: Seapoint, ♂ 1934, BPB (NMI) (det. MRS); LOUTH: Carlingford, ♀ 17 June 1921, WFJ (NMI) (det. MRS); WEXFORD: Mount Garrett Wood, ♀ 17 June 1982, swept in mixed wood, JMOC (NMI) (det. MRS) (all O'Connor and Butler, 1992: p. 164).

Ireland (Shaw, 2006: p. 231).

***Pimpla flavicoxis* Thomson, 1877**

ANTRIM: Rea's Wood, ♂♂ 30 May-2 May 1985 Malaise trap, MRB and RN (UM); ARMAGH: Poyntzpass, ♀ 26 October 1920, WFJ (NMI) (det. MRS); Peatlands, ♂ 13 August 1985, cutover bog, MRB (UM) (det. MRB and RN); CAVAN: Virginia, ♀ 30 May 1982, alder *Alnus* fen, JMOC (NMI) (det. MRS); CORK: Fota, ♂ 27 July 1986 KB (UM) (det. MRB); DONEGAL: Coolmore, ♀ 2 September 1915, WFJ (NMI) (det. MRS); DOWN: Dundrum, ♀♀ 10 August 1926, WFJ (NMI) (det. MRS); Bangor, Stricklands Glen, ♂ 4 June 1984, privet *Ligustrum*, MRB (UM); Bangor, ♂ 20 December 1972 (emerged 30 December) hatched from a lepidopteran pupa (pinned with specimen), CR (UM) (det. JPB); Cultra, ♂♂ 7 June 1985, MRB and RN (UM); Tollymore, ♀ 21 August 1984, MRB (UM); Murlough NNR, ♀ 2-9 October 1985, RN (UM) (det. MRB and RN); FERMANAGH: Marble Arch, ♂♀ 31 July 1985, deciduous woodland, MRB and RN (UM) (det. MRB and RN); KERRY: Killarney, ♀ August 1924, EFB (NMI) (det. MRS); Tomies Wood, Killarney, ♀ 15 September 1981, JPOC (NMI) (det. MRS); LONDONDERRY: Roe Estuary, ♂ 12 August 1985, swept riverine pasture, RA (UM); TYRONE: Moy, ♂♂♀♀ May, June, August and September (many specimens for all these months), MRB and RN (UM) (det. MRB

and RN); WEXFORD: Ballyhighland, ♀♀ 14 June 1982, JMOC (NMI) (det. MRS); Killoughrim, ♀ 16 June 1982, JMOC (NMI) (det. MRS); Mount Garrett, ♂♀♀ 17 June 1982, mixed wood, JMOC (NMI) (det. MRS); WICKLOW: Rathdrum, ♀ 8 July 1927, AWS (NMI) (det. MRS); The Murrough, ♂ 1 August 1926, AWS (NMI) (det. MRS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 78 very common throughout the British Isles).

***Pimpla melanacrias* Perkins, 1941**

DOWN: Rostrevor, ♂ 29 May 1923, field, WFJ (NMI) (det. MRS); FERMANAGH: Cuilcagh Mountain, ♂ 18 June 1983, MRB and RN (UM) (det. MRB); LOUTH: Carlingford, ♂ 23 June 1921, WFJ (NMI) (det. MRS); WEXFORD: Mount Garrett, ♂ 17 June 1982, mixed wood, JMOC (NMI) (det. MRS); WICKLOW: Calary, ♂ 28 August 1942, JNH (NMI) (det. MRS) (O'Connor, 2004b: p. 432).

Ireland (Fitton, Shaw and Gauld, 1988: p. 80).

***Pimpla rufipes* (Miller, 1759)**

synonym *Pimpla hypochondriaca* (Retzius, 1783)

synonym *Pimpla instigator* (Fabricius, 1793)

ANTRIM: Belfast, ♀ May 1974 PD (UM); ARMAGH: Aghalee, 2♀♀ 7 October 1984, GM (UM); CLARE: Kilrush, ♀ 27 August 1926, RAP (NMI) (det. MRS as *Pimpla hypochondriaca*); CORK: Glengarriff, ♀ 1943, J. E. Flynn (NMI) (det. MRS as *Pimpla hypochondriaca*); DOWN: Belfast, ♀ October 1983, RP (UM) (det. MRB and RN as *Pimpla hypochondriaca*); Murlough NNR, ♀♀ 2 and 30 October 1984, BHN and 9 June 1973, sandy heath AGI (both UM) (det. MRB and RN as *Pimpla hypochondriaca*); Jane's Shore, Old Quoile Bridge, ♀ 8 September, MRB (UM); DUBLIN: Dublin City, ♀9 September 1982, inside building, JMOC (NMI) (det. MRS as *Pimpla hypochondriaca*); GALWAY: Portumna, ♂ 21 August 1927, RAP (NMI) (det.MRS as *Pimpla hypochondriaca*) (all unpublished); KERRY (South): no locality, June 1902 (Saunders *et al*., 1903: p. 68 as *Pimpla instigator*); KERRY: Rossbeigh, AD (Morley, 1908a: p. 95 as *Pimpla instigator*); LOUTH: Termonfeckin, ♀ August

1924, WFJ (NMI) (Johnson, 1927: p. 159 as *Pimpla instigator*); MAYO: Clare Island, ♀ June 1911, WFJ (NMI) (det. MRS as *Pimpla hypochondriaca*); TYRONE: Moy, ♀ 29 August 1983, MRB (UM) (det. MRB as *Pimpla hypochondriaca*) (both unpublished); WATERFORD: Cappoquin, August, JJK (Johnson, 1917a: p. 39 as *Pimpla instigator*); Stradbally, ♀ 22-30 June 1907, HWA (Morley, 1908b: p. 276 as *Pimpla instigator*. A very large specimen); WEXFORD: Duffcarrick, Courtown, ♂ 15 May 1925, AWS (NMI) (det. MRS as *Pimpla hypochondriaca*); WICKLOW: Arklow District, ♂ 28 August 1925, AWS (NMI) (det. MRS as *Pimpla hypochondriaca*); Knocksink Wood, ♀ 21 June 1977, MCDS (NMI) (det. MRS as *Pimpla hypochondriaca*); Newcastle, The Murrough, ♀ 17 July 1926, AAL (NMI) (det. MRS as *Pimpla hypochondriaca*) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 80 as *Pimpla hypochondriaca*. Widely distributed in the British Isles).

***Pimpla spuria* Gravenhorst, 1829**

synonym *Pimpla strigipleuris* Thomson, 1877

ANTRIM: Portrush, ♀ August 1926, AWS (NMI) (det. MRS) (unpublished); DOWN: Greencastle, ♀ 15 August 1930, roadside, ♀ 22 August 1930, sandhills, WFJ (NMI) (conf. MRS) (Johnson, 1931c: p. 140); Killough, ♀ 6 July 1927, AWS (NMI) (det. MGF); Newcastle, ♀ 6 September 1927, WFJ (NMI) (det. MRS); Murlough NNR, ♂♀ 9-15 October 1984 Malaise, BHN (UM) (det. MRB and RN); DUBLIN: Howth, ♀ 1910, JNH (NMI) (det. MRS); Skerries, ♀ 8 August 1926, AWS (NMI) (det. MRS); KERRY: Woodlawn, Killarney, ♀ 1 October 1928, EFB (NMI) (det. MRS); MAYO: Carrowmore Hill, Louisburgh, 500ft (570ft on label), ♀ (var. *strigipleuris* Thomson) emerged 29 July 1910 from a pupa of the antler moth *Cerapteryx graminis* (L.) (*Charaeas graminis*) (Lepidoptera: Noctuidae) found under a stone on the top on 16 July 1910, CM (NMI) (misidentification, by CM as *turionellae*) (det. MRS); TYRONE: Moy, ♂♂ 4 June 1984, 2 June 1985, hawthorn *Crataegus*, herbaceous verge, ♀♀ 9-19 August 1983 and 5 August 1983 (UM) (det. MRB); WEXFORD: Kilgorman, ♀ 20 August 1925, AWS (NMI) (det. MRS); WICKLOW: Arklow

District, ♀ 12 August 1925, AWS (NMI) (det. MRS); Killoughter, ♂ 30 September 1928, AWS (NMI) (det. MRS); Powerscourt, ♀ 7 June 1928, AWS (NMI) (det. MRS) (all unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 81 uncommon but widely distributed in the British Isles).

***Pimpla turionellae* (Linnaeus, 1758)**

synonym *Pimpla examinator* (Fabricius, 1804)

ANTRIM: Belfast, 13 June 1909, HLO (NMI) (Johnson, 1912a: p. 78 as *Pimpla examinator-turionellae*); same locality, 13 June 1909, HLO (Johnson, 1912a: p. 78); Cave Hill, ♂, HLO (NMI) (Johnson, 1912a: p. 78 as *Pimpla examinator*); ARMAGH: Armagh, ♂ 19 May 1894, WFJ, det. CM (Johnson, 1904a: p. 256; Johnson, 1904b: p. 262); Poyntzpass, May, among herbage on roadside, WFJ (Johnson, 1913: p. 140 as *Pimpla examinator*; same locality, August, WFJ (Johnson, 1913: p. 140); same locality, among herbage, WFJ (NMI) (Johnson, 1916a: p. 20); CARLOW: Cloughristick, ♀♀ 24 September 1982, JMOC (NMI) (det. MRS) (unpublished); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 140); same locality, on roadside, WFJ (Johnson, 1915: p. 131 as *Pimpla examinator*); same locality, September, at sallows *Salix*, WFJ (Johnson, 1916a: p. 20); Portnoo, September 1917, WFJ (Johnson, 1918: p. 108); DOWN: Cairnshill, Belfast, ♀ 26 August 1985, on window of house in a Belfast suburb, RA (UM); Murlough NNR, 2♂♂ 9-15 and 16-22 October 1984, Malaise trap, BHN (UM) (det. MRB) (both unpublished); Dromore, August 1925, WFJ; Dundrum, June and August 1926, WFJ (NMI) (both Johnson, 1927: p. 159 ♂♀); Greencastle, ♀ 22 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as *Pimpla examinator*); Rostrevor, May 1923, a large ♂ (11mm in length), WFJ (Johnson, 1927: p. 159 ♂♀); Warrenpoint, ♂♂ 4 June and 17 August, WFJ (Johnson, 1929: p. 136); DUBLIN: North Bull Island, 1960-1963, salt marsh, BH (det. AWS) (NMI) (Speight and Healy, 1977: p. 153); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 and var. *rufitibia* Morley, and *strigipleuris* Thomson); Termonfeckin, August 1924 including var. *strigipleuris* Thomson, WFJ (NMI)

(Johnson, 1927: p. 159); [MAYO: Carrowmore Hill, Louisburgh, 500ft, var. *strigipleuris* Thomson bred from a pupa of the antler moth *Charaeas graminis* (now *Cerapteryx graminis* (L.)) (Lepidoptera: Noctuidae) found under a stone on the top on 29 July 1910, CM (misidentification, see *spuria* (det. MRS)]; Clare Island, May 1909 and September 1910, JNH and WFJ (NMI); Westport, PEG (Morley, 1911a: p. 12); SLIGO: Rosses Point, ♀ June 1905, WFJ (NMI) (Johnson, 1907: p. 246; Morley, 1907b: p. 160); TYRONE: Moy, ♀♀ 1-7 October 1984, Malaise trap and 17-24 September 1984, Malaise trap, MRB and RN (UM) (det. MRB) (unpublished); WEXFORD: Kilmore, August, AB (Morley, 1908a: p. 102); WICKLOW: Rathdrum, ♀ 12 August 1926, AWS (NMI) (det. MRS) (unpublished).

Ireland (Fitton, Shaw and Gauld, 1988: p. 81 common, particularly where there are trees, and widespread in the British Isles).

Note: there is a very large collection of this species in NMI and only some material is indicated above.

[*Pimpla* sp.

KERRY: Kenmare, ♀ 30 June 1901, JWY (Morley, 1902: p. 55); Killarney, 2 bred from larvae of *Sesia scoliiformis* (now *Synanthedon scoliaeformis* (Borkhausen)) (Lepidoptera: Sesiidae), WFVK, det. Bignell (Kane, 1895).]

POEMENIINAE

The Poemeniinae is a small subfamily, represented in both temperate and tropical zones, but with only one species in the Afrotropical region and absent from the Australasia.

It seems likely that all members of the subfamily attack wood-inhabiting hosts. Some, such as *Poemenia*, have been reared from sphecid wasp nests made in old beetle burrows, but others are probably parasites of wood-boring beetles and the best-known genus, *Pseudorhyssa*, comprises cleptoparasites of rhyssine ichneumonids.

***Deuteroxorides elevator* (Panzer, 1799)**

WICKLOW: no locality (Fitton, Shaw and Gauld, 1988: p. 90).

***Poemenia hectica* (Gravenhorst, 1829)**

KERRY: Killarney, {♀ August 1937, EFB (NMI) det. MRS)} (Fitton, Shaw and Gauld, 1988: p. 89; Alexander, 2000: p. 76); MEATH: Thomastown Bog, ♂♀♀ emerged May 1999 (one ♀ 20 May), ex 1998 trap nests with *Passaloecus monilicornis* Dahlbom (Hymenoptera: Sphecidae) in woodland on valley bog, COR (det. MRS) (NMI and NMS) (Shaw, 2006: p. 235).

RHYSSINAE

The Rhyssinae is a moderate sized subfamily, which was formerly part of the Pimplinae. Its 230-odd species include some of the ichneumonids most familiar to the layman, at least through the medium of books. Some such as *Rhyssa persuasoria* (Linnaeus) and *Megarhyssa* species are frequently illustrated as 'typical' ichneumon-flies, presumably because of their large size, spectacular ovipositors and oviposition habits. The British Isles fauna comprises just two species.

Niche specificity is strikingly illustrated by members of this relatively specialised subfamily. For instance, *Rhyssa persuasoria* is associated with siricid woodwasps in coniferous trees. Infested trees may be detected by some response to the woodwasps' fungal symbiont *Amylostereum*. Locating hosts and ovipositing onto them through a great thickness of timber is not easy and despite the impressive adaptations of rhyssines they have a remarkably high rate of 'misses' when drilling for hosts. *Rhyssa persuasoria*, however, is able to develop on woodwasp larvae of all sizes (sometimes already harbouring larvae of the cynipoid primary parasite *Ibalia*), woodwasp pupae and, acting almost as a pseudohyperparasite, on the larvae and pupae of *Ibalia*. It has even been reported as developing successfully on woodwasp adults still in their pupal cells.

***Rhyssa persuasoria* (Linnaeus, 1758)**

ANTRIM: Glenarm; DERRY: Ballykelly (both Kirk, 1975: p. 216); DOWN: Lenaderg, 2♀♀, June, CMD (Johnson, 1919b: p. 115; Johnson, 1921a: p. 106); Newcastle (Kirk, 1975: p. 216); Rostrevor, ♂ 20 May 1929, woods, WFJ (Johnson,

1930: p. 157); DUBLIN: Orlagh College, Rathfarnham, 3 July 1908, E. O'Leary (Halbert, 1920: p. 25); FERMANAGH: Tempo Manor, ♂11♀♀, CL (Johnson, 1919b: p. 116); KERRY: Kenmare; Muckross; Parknasilla (all Kirk, 1975: p. 216); KILDARE: Clongoweswood, ♂♂♀♀ May 1912, many specimens flying around a rustic summer house the posts of which were riddled by the borings of the great pine sawfly *Urocerus gigas* (L.) (*Sirex gigas*) (Hymenoptera: Siricidae), JNH (Halbert, 1920: p. 25); LAOIS (Queen's County): Mountrath, ♀♀ (Halbert, 1920: p. 25); LOUTH: Blackhall near Clogher Head, woodland, G. H. Pentland (Pentland, 1912: pp 147-148); TYRONE: Baronscourt; Gortin Glen (both Kirk, 1975: p. 216); WATERFORD: Stradbally, ♀ 1906, HWA (Morley, 1908a: p. 28); WICKLOW: Avondale, (Halbert, 1908: p. 152; Halbert, 1920: p. 25); Devil's Glen, ♀ July 1906, flying to a felled pine tree, JNH (Halbert, 1908: p. 152; Halbert, 1920: p. 25); Glencree; Glenmalure (both Kirk, 1975: p. 216).

Ireland (Kirk, 1975: pp 215-221 detailed data on the species including a distribution map; Fitton, Shaw and Gauld, 1988: p. 91 uncommon, although well represented in collections and widely distributed in...Ireland; Yu, 1998: CD-Rom; Alexander, 2000: p. 76).

STILBOPINAE

This subfamily is not easily characterised, despite its small size. However, the very common European species *Stilbops vetula* (Gravenhorst) has a distinctive appearance and is easily recognized. Four out of the five European species of *Stilbops* occur in the British Isles. As far as is known Stilbopinae are solitary koinobiont endoparasitoids of Incurvariidae (Lepidoptera). The egg is laid in the host egg and the adult emerges from the host cocoon. Adults of *S. vetula* are often found in deciduous woodland in late April and May swarming around fresh foliage. It attacks *Adela reaumerella* (Linnaeus), although its life cycle is known only in outline. Female *Stilbops ruficornis* (Gravenhorst) have been observed probing with their ovipositor, which is much longer than in other species of the genus, in the flower heads of *Knautia arvensis* and ovipositing into the eggs of *Nemophora metallica* (Poda) concealed there. The

parasitised host overwinters as a part grown larva and continues feeding in the following spring. *Panteles schutzeana* is a parasite of the very local moth *Lampronia fuscatella* (Tengström) (Incurvariidae), which makes galls in birch twigs.

***Panteles schuetzeanus* (Roman, 1925)**

WICKLOW: Glenmalure, specimen emerged last week of August 1948, reared from a gall which produced *Lampronia fuscatella* (Tengström, 1848) [synonym *Lampronia tenuicornis* Stainton, 1854] (Lepidoptera: Prodoxidae) collected 13 March 1948 among birch *Betula* trees, ESB (det. Kerrich) (Baynes, 1949: pp 338-339).

***Stilbops limneriaeformis* Schmiedeknecht, 1888**

CARLOW: near Borris, ♀ 10 June 1935, swept, AWS; DOWN: Tollymore Park, ♂ 19 May 1957 (NMI) and ♀ 26 May 1957 (NMI), ♀ 12 May 1961, 2♂♂ 16 May 1961, ♀ 12 June 1961, specimems from 1961 swept off, beneath, or close by beeches *Fagus*, AWS (both Stelfox, 1961a: p. 161 Mr. J. F. Perkins agrees with my identification). Ireland (Fitton, 1984a: p. 191; Yu, 1998: CD-Rom).

***Stilbops vetulus* (Gravenhorst, 1829)**

synonym *Phobetes chrysostomus* (Gravenhorst, 1829)

[DONEGAL: Coolmore, September 1916, on roadside among herbage, WFJ (Johnson, 1917a: p. 39 as *Stilbops chrysostomus*; reidentified as *Stilbops ruficornis* by MRB but the identity of the specimen is still problematic)]; MAYO: Lough Namucka (Namocka), ♂ July 1910, swept from the reeds, JNH (Morley, 1911a: p. 14 as *Euryproctus chrysostomus*; Morley, 1911b: p. 246 as *Euryproctus chrysostomus*); WICKLOW: Manor Kilbride, ♀ 3 June 1953, AWS (NMI) (det. AWS) (unpublished).

TERSILOCHINAE

The Tersilochinae is a medium-sized subfamily comprising small, inconspicuous species. Most are koinobiont endoparasites of larval Coleoptera, including economically important pests such as the weevils and ‘flower beetles’ which damage oil seed rape. The known exceptions include *Gelanes* species, which have been reared in North America and Britain from larvae of sawflies of the genus *Xyela*

(Hymenoptera: Xyelidae). The Coleoptera reliably recorded as hosts have a variety of habits and include members of the families Byrrhidae, Cisidae, Chrysomelidae, Curculionidae, Melandryidae, Nitidulidae, Scolytidae and Staphylinidae. The larvae of most of the known hosts are concealed; often in plant tissue. *Barycnemis* species, which have rather robust ovipositors, attack larvae in the soil. A common factor linking hosts is that they construct a pupal chamber or cocoon in the soil. All species develop as solitary internal parasites.

Most of our knowledge of the biology of tersilochines comes from investigations made in connection with their parasitism of pest beetles. The crops in Europe in which tersilochine species help to control populations of pests include oil seed rape and its relatives. A number of workers have assessed the roles tersilochines play in these situations but little has been done to enhance their effect. There are striking differences in egg placement and development between the species which have been investigated. The egg may be deposited free in the haemocoel of the host, attached to an internal organ, or placed in the body wall. The egg of *Tersilochus heterocerus* (Thomson) is simple in shape and has a smooth, blackish chorion whereas that of *Phradis morionellus* (Holmgren) has a colourless chorion with a dense covering of minute spines. The eggs of *Diaparsis temporalis* Horstmann and *D. carinifer* (Thomson) have a 'knob-like' protrusion on one side, by means of which they are attached to tissue within the thoracic region of the host. Some individuals of *D. temporalis* produced eggs without, or with only a rudimentary, protrusion and no protrusion is mentioned as being present in *Tersilochus tripartitus* (Brischke), the eggs of which are attached usually to the malpighian tubules of its host. In the South American species *Stethantyx parkeri* (Blanchard) the egg has a weak protrusion and is deposited in the body wall of the host between the cuticle and the epidermis. Incubation usually takes only a few days, and at least in *T. tripartitus* and *P. morionellus* is accompanied by a large increase in the volume of the egg. In *Diaparsis* and *Tersilochus* hatching is rapid but in *S. parkeri* development of the posterior part of the embryo is slower than that of the anterior and the larva slowly issues from the

egg over a period of about 13 days as development proceeds. In *T. heterocerus* the larva hatches only when the host is fully fed and about to enter the soil to pupate.

The first instar larva is of the caudate type and in *Diaparsis* and *S. parkeri* it bears two pairs of pseudopods near its posterior end. The first instar larva feeds but does not moult to the second instar until the host larva is fully-grown and has constructed its pupal cell in the ground. Development of the parasite is then rapid and it is fully-grown within a few days. The last instar larva of *T. conotracheli* leaves the host and completes its feeding externally. The fully-grown parasite larva spins a cocoon within the host pupal cell. The cocoons of tersilochines usually have a distinct median band, for example the cocoon of *Diaparsis stramineipes* (Brischke) is papery in texture and light brown, with a thickened median band of a creamy colour. The adult emerges by biting a small round hole in the end.

Most of the European species which have been studied are univoltine. In *Tersilochus* and *Phradis* pupation immediately follows cocoon formation and the pupal period is brief, but the adult remains quiescent within the cocoon until the following year. In *Diaparsis* the fully-grown larva overwinters within its cocoon and pupation does not take place until the following spring. There is evidence that species of *Aneuclis* are multivoltine and that *A. melanarius* (Holmgren) overwinters as a first instar larva in larvae of certain hosts whilst utilizing a different host for its summer generation(s).

Superparasitism appears to occur in nature to a relatively large extent and is mentioned by several authors. In all cases investigated only one individual ever survived. In *Stethantyx parkeri* excess first instar larvae were found dead within the host and usually bore signs of physical injury to the posterior part of the body. In *Tersilochus conotracheli*, in cases of superparasitism, while one larva remained healthy all others were found dead and enclosed by a mass of cells.

Successful encapsulation of eggs and larvae sometimes occurs in the normal host of *Diaparsis* species and perhaps indicates a barely adequate level of physiological adapation on the part of the parasite. *T. heterocerus* usually failed to complete its

development when other parasites were present and that even in the absence of other parasites some eggs failed to hatch and first instar larvae died. He also encountered 'numerous' overwintering host adults with one to three black egg-shells embedded in the fat-body, showing unsuccesful parasitism.

***Aneuclis melanaria* (Holmgren, 1860)**

DUBLIN: Glenasmole, ♀ 6 August 1952, AWS (NMI) (det. KH) (unpublished).

Ireland (Horstmann, 1981: p. 19 Washington).

***Barycnemis angustipennis* (Holmgren, 1860)**

DONEGAL (WD): Tramore, Horn Head, ♀ 12 June 1955, AWS (NMI) (det. KH) check this specimen; DOWN: Murlough House, ♂ 22 August 1957, dunes, AWS (NMI) (det. KH); WICKLOW: Athdown, ♂ 1 September 1938, AWS (NMI) (det. KH); Powerscourt Deerpark, ♂ 1 September 1948, AWS (det. KH); Upper Liffey, ♂ 6 September 1953, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 70 Washington; Khalaim, 2004: p. 58).

***Barycnemis gravipes* (Gravenhorst, 1829)**

Ireland (Horstmann, 1981: p. 69 Washington; Khalaim, 2004: p. 58).

***Barycnemis harpura* (Schrank, 1802)**

DOWN: Rostrevor, ♀ 25 July 1931, WFJ (NMI) (det. AR); SLIGO: Trawulla, ♂ 25 July 1933, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 59 Washington).

***Barycnemis punctifrons* Horstmann, 1981**

Ireland (Horstmann, 1981: p. 69; Khalaim, 2004: p. 59).

***Diaparsis* (*Diaparsis*) *carinifer* (Thomson, 1889)**

DUBLIN: Clondalkin (C'l'd'k'n), ♀ 13 July 1941, AWS (NMI) (det. KH); WICKLOW: Athdown, ♀ 22 June 1941, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 19 Washington).

***Diaparsis* (*Diaparsis*) *nutritor* (Fabricus, 1804)**

synonym *Diaparsis gemina* (Holmgren, 1860)

ARMAGH: Poyntzpass, {7} May {1915} in field, WFJ (NMI) (Johnson, 1917a: p. 40

as *Diaparsus geminus*); Poyntzpass, field, {18} October {1919}, on wing at sallows *Salix* and at laurels *Prunus laurocerasus*, WFJ (NMI) (Johnson, 1920a: p. 10 as *Diaparsus geminus*; Johnson, 1921a: p. 107 as *Diaparsus geminus*); DONEGAL: Coolmore, {3} September {1915}, in the sandhills about thistles, WFJ (Johnson, 1916a: p. 21 as *Diaparsus*).

***Diaparsis* (*Ischnobatis*) *stramineipes* (Brischke, 1880)**

DUBLIN: Ashtown, near the Royal Canal, reared from the galls of the sawfly *Pontania proxima* (Lepeletier) (Hymenoptera: Tenthredinidae) (AL-Saffar and Aldrich, 1997: pp 220-221).

Ireland (Horstmann, 1981: p. 19 Washington).

***Epistathmus crassicornis* Horstmann, 1971**

DUBLIN: Slade Brook, ♀ 10 August 1951, AWS (NMI) (det. KH); KERRY: Derrycunnihy, Killarney, ♀ 15 July 1933, AWS (NMI) (det. KH); KILDARE: Landenstown, ♀ 30 August 1939, ♀ 21August 1946, AWS (NMI) (det. KH); SLIGO: Trawallua, ♀ 29 July 1933, AWS (NMI) (det. KH); WICKLOW: Athdown, ♀ 1 August 1937, AWS (NMI) (det. KH); Clara, ♀ 4 September 1938, AWS (NMI) (det. KH); Holdenstown, ♀♀ 9 August 1953, AWS (NMI) (det. KH); Lugnaquilla, ♀ 8 August 1937, AWS (NMI) (det. KH); Tinode, ♀ 13 September 1953, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 19 Washington; Khalaim, 2004: p. 58).

***Gelanes simillimus* Horstmann, 1981**

DUBLIN: Glenasmole, ♀ (paratype) 24 April 1938, AWS (Washington) (Horstmann, 1981: p. 39).

Ireland (Horstmann, 1981: p. 40).

***Heterocola* (*Heterocoloides*) *linguaria* (Haliday, 1839)**

Ireland (Horstmann, 1981: p. 19 Washington).

***Phradis brevis* (Brischke, 1880)**

DOWN: Rostrevor, ♂ 14 July 1927, WFJ (NMI); KERRY: Dunkerron, ♂♀ 4 July 1935, at hedge woundwort *Stachys sylvatica*, AWS (NMI) (det. KH) (both

unpublished).

Ireland (Horstmann, 1981: p. 18 Washington).

***Phradis interstitialis* (Thomson, 1889)**

DONEGAL: Tranarossan, ♀ 16 June 1960, AWS (NMI) (det. KH); DOWN: Newcastle, ♀30 May 1956, AWS (NMI) (det. KH); DUBLIN: Dollymount, ♀25 May 1934, AWS (NMI) (det. KH); Glenasmole, ♀ 13 June 1938, AWS (NMI) (det. KH); KILDARE: Royal Canal, ♀ 14 June 1949, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 18 Washington).

***Phradis minutus* (Bridgman, 1889)**

DUBLIN: North Bull, f 18 May 1953, AWS (NMI) (det. KH); SLIGO: Tullaghan, ♀♀ 26 June 1936, coast, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 18 Washington).

***Phradis morionellus* (Holmgren, 1860)**

DUBLIN: North Bull, ♀ 25 May 1943, AWS (NMI) (det. KH); TIPPERARY: below Lough Borheen, Galtees, ♀ 7 June 1944, *circa* 1450 feet, AWS (NMI) (det. KH); Lough Curra, ♀ 23 May 1944, 1880 feet, AWS (NMI) (det. KH) (all unpublished)

Ireland (Horstmann, 1981: p. 18 Washington).

***Phradis rufiventris* Horstmann, 1981** **New to Ireland**

WEXFORD: Curracloe, ♀ 25 July 1937, AWS and GMS (as *Heterocola*) (BMNH).

***Phradis thyridialis* Horstmann, 1981** **New to Ireland**

DUBLIN: Slade of Saggart, ♀ 4 May 1938, AWS (BMNH); WICKLOW: Dowry, ♀ 10 June 1946, AWS (BMNH).

***Probles* (*Euporizon*) *longicaudator* Aubert, 1972**

Ireland (Horstmann, 1981: p. 20 Washington).

***Probles* (*Euporizon*) *marginatus* (Bridgman, 1886)**

DOWN: Moy House, ♂ 28 May 1963, AWS (NMI) (det KH); WICKLOW: Hollywood, ♀ 15 August 1948, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 20 Washington).

***Probles* (*Euporizon*) *montanus* Horstmann, 1971**

KILDARE: Landenstown, ♀ 25 July 1948, AWS (NMI) (det. KH); LAOIS: Portarlington, ♀ 26 July 1936, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 20 Townes, Washington).

***Probles* (*Euporizon*) *nigriventris* Horstmann, 1971**

ANTRIM: Bushfoot, ♀♀ 9 June 1938, AWS (det. KH); WICKLOW: Buckroney, ♀ 14 August 1946, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 20 Washington).

***Probles* (*Euporizon*) *rufipes* (Holmgren, 1860)**

ARMAGH: Poyntzpass field, {18} October {1919}, on wing at sallows *Salix*, WFJ (Johnson, 1920a: p. 10 as *Diaparsus*).

Ireland (Horstmann, 1981: p. 20 Washington (NMI)).

***Probles* (*Euporizon*) *truncorum* (Holmgren, 1860)**

Ireland (Horstmann, 1981: p. 20 Washington).

***Probles* (*Microdiaparsis*) *microcephalus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {9} August 1915, in field, WFJ (NMI); DONEGAL: Coolmore, {8} September 1914, on roadside, WFJ (NMI) (both Johnson, 1917a: p. 40 as *Diaparsus*); WICKLOW: Devil's Glen, ♂♀ 29 September 1954, AWS (NMI) (det. KH) (unpublished).

Ireland (Horstmann, 1981: p. 20 Townes, Washington).

***Probles* (*Microdiaparsis*) *neoversutus* (Horstmann, 1967)** **New to Ireland**

SLIGO: Trawallua, ♂ 3 August 1933, AWS (det. KH).

***Probles* (*Microdiaparsis*) *versutus* (Holmgren, 1860)**

DOWN: Greencastle, ♀ 18 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 141 as *Diaparsus*. Var. with hind femora red).

***Probles* (*Probles*) *erythrostomus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass field, {18} October {1919}, on wing at sallows *Salix*, WFJ (Johnson, 1920a: p. 10 as *Diaparsus*); KILDARE: Glending, ♂ 12 September 1937, AWS (NMI) (det. KH); Royal Canal, ♀ 3 October 1945, AWS (NMI) (det. KH); LONGFORD: Castle Forbes, ♀ 6 October 1937, AWS (NMI) (det. KH); WICKLOW:

Ballinacor, ♂ 26 October 1943, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 21 Washington).

***Probles* (*Probles*) *flavipes* (Szépligeti, 1899)**

DONEGAL: Slieve League, Killybegs District, ♂ 14 August 1933, AWS (NMI) (det. KH).

Ireland (Horstmann, 1981: p. 21 Washington).

***Sathropterus pumilus* (Holmgren, 1860)**

KILDARE: Landenstown, ♀ 13 September 1942, AWS (NMI) (det. KH); WICKLOW: Murrough, ♀ 25 August 1953, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 19 Washington).

***Spinolochus laevifrons* (Holmgren, 1860)**

DOWN: Murlough House, ♂ 3 July 1957, dunes, AWS (NMI) (det. KH) (unpublished).

Ireland (Horstmann, 1981: p. 20 Washington; Khalaim, 2004: p. 58).

***Tersilochus* (*Gonolochus*) *caudatus* Holmgren, 1860**

DUBLIN: Clondalkin (C'l'd'k'n), ♀ 14 May 1944, AWS (NMI) (det. KH); St Anne's, Clontarf, ♀ 20 April 1939, EOM (NMI) (det. KH); KILDARE: Sallins, ♀ 28 April 1935, AWS (NMI) (det. KH); WICKLOW: Boher-na-breena, ♀ 5 May 1923, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 21 Washington).

***Tersilochus* (*Pectinolochus*) *lapponicus* Hellén, 1958**

DUBLIN: Glenasmole, ♀ 10 May 1936, AWS (NMI) (det. KH); KILDARE: Sherlockstown, ♀ 16 May 1948, AWS (NMI) (det. KH); LAOIS: near Emo Park, ♀ 20 April 1936, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 21 Washington).

***Tersilochus* (*Pectinolochus*) *striola* Thomson, 1889**

DUBLIN: Glenasmole, ♀ 20 March 1935, ♀♀ 10 April 1936, AWS (NMI) (det. KH) (unpublished).

Ireland (Horstmann, 1981: p. 21 Washington).

***Tersilochus* (*Pectinolochus*) *terebrator* (Horstmann, 1971)**

Ireland (Horstmann, 1981: p. 21 Washington).

***Tersilochus* (*Tersilochus*) *curvator* Horstmann, 1981**

Ireland (Horstmann, 1981: p. 46 Townes, Washington).

***Tersilochus* (*Tersilochus*) *heterocerus* (Thomson, 1889)**

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *jocator* Holmgren, 1859**

DUBLIN: St Anne's, ♀ 9 May 1943, EOM (NMI) (det. KH as forma *longicauda*); WICKLOW: Woodend, ♀ 31 May 1951, AWS (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 22 forma *typica* and forma *longicauda*. Washington).

***Tersilochus* (*Tersilochus*) *liopleuris* (Thomson, 1889)**

WESTMEATH: Old Head, ♀ 30 May 1942, AWS (NMI) (det. KH) (unpublished).

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *longicaudatus* Horstmann, 1971**

DUBLIN: The Slade of Saggart, ♀ 24 May 1939, AWS (NMI) (det. KH); WICKLOW: Clara, ♀ 1 June 1937, AWS (NMI) (det. KH) (both unpublished).

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *longicornis* Thomson, 1889**

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *nitidipleuris* Horstmann, 1971**

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *obliquus* Thomson, 1889**

DUBLIN: Portrane, ♀ 8 June 1941, AWS (NMI) (det. KH); St Anne's, Clontarf, ♀ 31 May 1936, EOM (NMI) (det. KH); WICKLOW: Manor (M.) Kilbride, ♀ 13 June 1951, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *obscurator* Aubert, 1959**

DUBLIN: Dartry, ♀ 16 May 1955, AWS (NMI) (det. KH); Marlfield, ♀

30August1945, AWS (NMI) (det. KH); WICKLOW: The Murrough, ♀ 30 May 1954, AWS (NMI) (det. KH) (all unpublished).

Ireland (Horstmann, 1981: p. 22 Washington).

***Tersilochus* (*Tersilochus*) *ruberi* Horstmann, 1981**

TIPPERARY (South Tipperary): Ballinacourty (B'c't'y), ♀ (paratype) 28 May 1944 and ♀ (paratype) 6 June 1944 (NMI), AWS (Washington) (Horstmann, 1981: p. 47).

Ireland (Horstmann, 1981a: p. 48).

***Tersilochus* (*Tersilochus*) *tripartitus* Brischke, 1880**

Ireland (Horstmann, 1981: p. 22 Washington).

TRYPHONINAE

This subfamily is best represented in the north temperate regions of the world, as are its main hosts the sawflies. However, some genera attack Lepidoptera and one of these, *Netelia*, is world-wide in distribution and is among the largest ichneumonid genera. Overall the Tryphoninae is a moderately large subfamily. All of its tribes are very distinct and there is a possibility that it is not a monophyletic grouping. All six tribes are represented in the British Isles and we have about 160 species.

This subfamily constitutes by far the largest assemblage of koinobiont ectoparasitoids. Unlike the other successful ectoparasitoid groups, tryphonines have avoided the need for adult females to invest heavily in gaining access to hosts concealed in protective structures such as cocoons. A specialised egg stage has been the key to their success, allowing them to exploit more easily accessible stages of their hosts. The egg is attached to the free-living larval host, but there is no significant development of the parasite until the host has constructed its cocoon. An egg on the outside of a fully active, free-living host must be securely attached; safe from destruction or dislodgement by the host; protected from damage while the host is moving about or entering the soil to make a cocoon; and resistant to desiccation.

The egg is secured in position by an anchor which passes through the host's integument. The anchors range from the relatively simple, coiled and thread-like, to

very complex structures which partially enclose the egg and leave little of it protruding above the surface of the host's body. Placement of the anchor is achieved by means of a specialised mode of oviposition. In contrast to almost all other ichneumonids the egg of tryphonines does not pass down the lumen of the ovipositor, only the anchor does so while the body of the egg is suspended below the ovipositor valves. The eggs are usually attached to parts of the thoracic segments or head of the symphytan or lepidopteran caterpillar, where they cannot be reached by its mandibles. However, destruction of eggs by caterpillars has been observed. Like the anchors themselves the preferred oviposition sites vary between species. In one extreme case, *Erromenus calcator* (Müller), the female oviposits through the host's anal opening and attaches the egg to the wall of the hind gut. Curiously, an almost identical egg placement strategy is used by another, completely unrelated ichneumonid, *Chorinaeus funebris* (Gravenhorst), of the subfamily Metopiinae. Tryphonine eggs have a tough, resistant chorion which presumably protects them from mechanical damage and desiccation. The chorion is often dark, almost black, and in some cases its surface has a strong distinctive microsculpture.

With a few possible exceptions, species of the tribes Tryphonini and Exenterini have sawflies of the superfamily Tenthredinoidea as hosts. The hosts of the Exenterini are all tenthredinids and diprionids. A single specimen of *Grypocentrus* is said to have been reared from an eriocraniid lepidopteran on birch, the larval habits of which parallel those of the leaf-mining sawflies of the tribe Fenusiini, the usual hosts of this genus. The significance of an isolated record of this kind is difficult to assess.

The tribe Phytodietini includes only two genera - *Netelia*, with an extremely large number of species, and *Phytodietus*, with relatively few. Both are world-wide in distribution. Species of *Netelia* are active at night and have the 'ophionoid facies' typical of such ichneumonids. *Netelia* females have a relatively short, sharply pointed ovipositor and can inflict a painful sting if not handled with care. All members of the tribe attack Lepidoptera. The egg stalk is long and loosely coiled, and does not have a specialised anchor at its tip. When first laid the stalk is elastic but later becomes rigid,

holding the egg firmly to the host's skin.

There is relatively little detailed information on the biology of the small tribe Oedemopsini. Species of *Eclytus* attack sawflies (Argidae and Nematinae (Tenthredinidae)) while other genera, as far as is known, have lepidopterous hosts. *Eclytus* also lacks the slightly swollen, weakly sclerotised area found part way along the lower valves of the ovipositor in other oedemopsine genera. It seems that this may be the place where the body of the egg emerges. However, this requires further investigation and confirmation. Also, the eggs of oedemopsines are generally much smaller than those of other tryphonines. The lepidopterous hosts of the tribe are quite diverse, but individual species appear to have well-defined regular host associations with particular families (for example, Tortricidae or Coleophoridae) with occasional extension of host usage into species of other families found in the same microhabitats. Oedemopsines are usually solitary but there is at least one instance of successful development of a brood of two *Hercus fontinalis*.

Three tribes of the Tryphoninae each comprise a single genus with very few species. *Sphinctus serotinus* (Gravenhorst) is the only European representative of the tribe Sphinctini. It is quite distinctive in appearance, mainly black and yellow in colour. It parasitises the limacodid moth *Apoda limacodes* (Hufnagel). The genus *Idiogramma*, which forms the tribe Idiogrammatini, is of particular interest because it parasitises the primitive sawfly genus *Xyela* and because the adult has elongate exodont mandibles. The best known ichneumonoids with exodont mandibles are the alysiine braconids, which use them principally in assisting their escape from the host's puparium and the substrate in which it is situated. The larvae of *Xyela* feed in the staminate cones of *Pinus* and the mandibles of *Idiogramma* may be used to separate the surrounding bracts during the search for a host larva.

Eclytini

***Eclytus* (*Anoplectes*) *multicolor* Kriechbaumer, 1896**

synonym *Eclytus praeclarus* Schmiedeknecht, 1912

KERRY (South): Glencar, ♂ 29 June 1934, afternoon, AWS; WICKLOW: The

Meeting of the Waters, Avoca, ♂ emerged 21 June 1931, ex cocoon of larva of sawfly (*Pteronidea* sp.) (Hymenoptera: Symphyta) taken on hazel *Corylus* on 1 August 1930, AWS (Stelfox, 1966a: p. 511 as *Eclytus praeclarus*).

***Eclytus* (*Eclytus*) *ornatus* Holmgren, 1857**

ARMAGH: Poyntzpass, {8} July {1914}, on hill, WFJ (NMI) (Johnson, 1915: p. 132 as *Eclytus*; Stelfox, 1966a: p. 509); KILDARE: Skerries Bog, near Athy, ♀ 3 October 1946, AWS (Stelfox, 1966a: p. 509); TIPPERARY (South): Ballinacourty, Glen of Aherlow, ♀ 15 September 1943, AWS (all Stelfox, 1966a: p. 509).

***Eclytus* (*Zapedias*) *exornatus* (Gravenhorst, 1829)**

DOWN: Tollymore Park, 2♂♂ 4 June 1961, AWS; DUBLIN: Slade of Saggart, ♀ 20 June 1943, AWS (both Stelfox, 1966a: p. 509).

Exenterini

***Acrotomus succinctus* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, June {14 June1914}, on the hill, WFJ (NMI) (Johnson, 1915: p. 132 as *Smicroplectrus quinquecinctus*; Kerrich, 1952: p. 397 The Irish record of this species (W. F. Johnson, 1915: 132) is based on a male of *Acrotomus succinctus*); DOWN: Rostrevor, ♂ 14 July 1931, WFJ (NMI) (det. AR); KERRY: Killarney district, near Gap, ♀ 14 July 1933, AWS (NMI) (det. GJK); KILDARE: Kilkea Park, ♂ 13 August 1939, AWS (NMI) (det. GJK); Landenstown, ♂ 28 August 1946, AWS (NMI) (det. GJK); Royal Canal, ♂ 10 August 1941, AWS (NMI) (det. GJK); WICKLOW: Powerscourt demense, ♀ 20 May 1927, AWS (NMI) (det. GJK) (all unpublished).

Ireland (Kerrich, 1952: p. 321 numerous, from several counties; p. 458).

***Cteniscus devius* (Mason, 1955)**

synonym *Diaborus lituratorius* (Linnaeus, 1761) misidentified

DONEGAL: Coolmore, September, among sallows *Salix*, WFJ (Johnson, 1916a: p. 21 as *Diaborus lituratorius*).

***Cteniscus nigrifrons* (Thomson, 1883)**

WICKLOW: Imaal, Leitrim, ♀ 14 July 1940, AWS (NMI) (det. GJK as *Eudiaborus*)

(unpublished).

Ireland (Kerrich, 1953: p. 153 as *Eudiaborus*).

***Cteniscus pedatorius* (Panzer, 1809)**

synonym *Eudiaborus filipalpis* (Thomson, 1883)

DONEGAL: Coolmore, ♀ 10 September 1915, road, WFJ (NMI) (det. GJK as *Eudiaborus*) (unpublished); KILKENNY: Mullinavat, ♀ 10 September 1950, RCF (RSM) (Shaw and Kasparyan, 2005: p. 10); WICKLOW: Tullyhenry, ♀ 28 September 1930, AWS (NMI) (det. GJK as *Eudiaborus*) (unpublished).

Ireland (Kerrich, 1953: p. 154 as *Eudiaborus filipalpis*).

***Eridolius aurifluus* (Haliday, 1839)**

ARMAGH: Poyntzpass, ♀ 2 October 1919, ♀ 26 August 1920, WFJ (NMI) (det. GJK) (unpublished); DONEGAL: Coolmore, September {♀ 26 September 1913}, on Umbelliferae, on roadside, rare, WFJ (NMI) (conf. GJK) (Johnson, 1914a: p. 66 as *Exenterus*. Haliday records it as occurring in Ireland on willows from May to September. It has been taken at Enniscorthy and at Louisburgh); KILDARE: Kilkea, ♂ 10 September 1940, AWS; Landenstown (marsh), 4♂♂2♀♀ 29 September 1946, AWS (Kerrich, 1952: p. 448 as *Cteniscus*); MAYO: Carrowmore Lough, ♂ July 1910, sweeping reeds, CM (Morley, 1911a: p. 14 as *Exenterus*; Morley, 1911b: p. 210 as *Exenterus*); SLIGO: Carrowgarry, ♀ 7 October 1940, AWS (Kerrich, 1952: p. 448 as *Cteniscus*); WEXFORD: Enniscorthy, 6 September 1898, AB (Morley, 1911b: p. 210 as *Exenterus*); WICKLOW: Blessington, ♂ 12 October 1941, AWS (NMI) (det. GJK) (unpublished).

Ireland (Haliday, 1839: p. 113 as *Tryphon*. On willows...May-Sept.; Morley, 1911b: p. 210 as *Exenterus*. Haliday, who says in his MS., now preserved in the Dublin Museum, that he took it himself commonly in Ireland; Morley, 1913: p. 261 as *Tryphon* (*Cteniscus*). Apparently not uncommon; Kerrich, 1952: pp 448-449 as *Cteniscus*. Haliday collection...including 2♀♀, 2♂♂ with green-marked pinheads indicating definite Irish origin...Additional material seen: Ireland, 27 specimens from ten different counties, A. W. Stelfox...Specimen No.1, a male of definite Irish origin, I

designate as allotype; Kerrich, 1952: p. 458 as *Cteniscus*; Townes *et al*., 1965: p. 115; Fitton, 1976: p. 335 as *Tryphon* (*Cteniscus*). Lectotype ♀...paralectotype ♀...(NMI); Yu, 1998: CD-Rom).

***Eridolius basalis* (Stephens, 1835)**

synonym *Exenterus hostilis* Holmgen, 1857

synonym *Eridolius flavilabris* (Holmgren, 1855)

ARMAGH: Poyntzpass, ♂ 1908, WFJ (Morley, 1911b: p. 209 as *Exenterus*); same locality, in fields, August, September, WFJ (Johnson, 1921: p. 106 as *Exenterus flavomaculatus* var. *hostilis* Holmgren); same locality, in fields, August, September, WFJ (Johnson, 1921: p. 106 as *Exenterus flavilabris*; Johnson, 1922b: p. 69 as *Exenterus flavilabis*); {CAVAN} (V.C. H.30): no locality (Shaw and Kasparyan, 2005: p. 12); {CLARE} (V.C. H.9): no locality (Shaw and Kasparyan, 2005: p. 12); KERRY (South): no locality, June 1902 (Saunders *et al*., 1903: p. 68 as *Cteniscus flavilabris*; Morley, 1911b: p. 210 as *Exenterus flavilabris*); MAYO: Louisburgh, ♂ 17 July 1910, CM (Morley, 1911a: p. 14 as *Eridolius hostilis*; Morley, 1911b: p. 211 as *Exenterus hostilis*. 15th of that month [this conflicts with the other date]).

***Eridolius bimaculatus* (Holmgren, 1856)**

Ireland (Broad, 2006).

***Eridolius consobrinus* (Holmgren, 1857)**

WICKLOW: Glen of Imaal, ♂ 27 May 1926, AWS (Kerrich, 1952: p. 437 as *Cteniscus*).

Ireland (Kerrich, 1952: p. 458 as *Cteniscus*).

***Eridolius curtisii* (Haliday, 1839)**

WICKLOW: Meeting of the Waters below Rathdrum, ♀ 6 August 1925, AWS (Kerrich, 1952: p. 428 as *Cteniscus*).

Ireland (Haliday, 1839: p. 113 as *Tryphon*. On a willow; June (NMI); Morley, 1911b: p. 204 as *Exenterus*. This appears to be a solitary ♀...but in his Ms. preserved in the Dublin Museum, the author says he has taken the present species commonly in

Ireland; Kerrich, 1952: p. 428 as *Cteniscus*. ♀ Haliday coll. (type), p. 458 as *Cteniscus*; Fitton, 1976: p. 335 as *Tryphon* (*Cteniscus*); Yu, 1998: CD-Rom).

***Eridolius dorsator* (Thunberg, 1824)**

synonym *Eridolius mitigosus* (Gravenhorst, 1829)

ARMAGH: Poyntzpass field, August and October, WFJ (Johnson, 1920a: p. 9 as *Eridolius mitigosus*; Johnson, 1921: p.106 as *Exenterus mitigosus*).

***Eridolius gnathoxanthus* (Gravenhorst, 1829)**

DUBLIN: Howth Castle, in wood, ♂ 10 August 1939, F. J. O'Rourke (NMI); KILDARE: Landenstown, ♀ 20 August 1941, AWS (NMI); Skerries Bog, 3♀♀ 26 September 1946, AWS (NMI); WICKLOW: Athdown, ♂ 20 August 1944, AWS; Rathdrum, ♀ 6 August 1927, AWS (NMI) (Kerrich, 1952: p. 442 as *Cteniscus*).

Ireland (Kerrich, 1952: p. 458 as *Cteniscus*; Jussila, 1965: p. 46 as *Cteniscus*; Yu, 1998: CD-Rom).

***Eridolius hofferi* (Gregor, 1937)**

DUBLIN: Slade Brook, ♂ emerged 6 August 1942, *ex* larva of the sawfly *Hemichroa crocea* (Geoffroy) (Hymenoptera: Symphyta) collected 21 September 1941, AWS; MAYO (W.): Old Head, wood, at the larva of the sawfly *Croesus* (Hymenoptera: Symphyta) on birch *Betula*, AWS; WATERFORD: Maghgiha, Dungarvan, ♀ 17 August 1928, AWS; WICKLOW: Glending Wood, ♀ 15 September 1938, AWS; Leitrim Barracks (Glen of Imaal), ♂ 11 August 1940, AWS (NMI) (all Kerrich, 1952: pp 422-423 as *Cteniscus*).

Ireland (Kerrich, 1952: p. 458 as *Cteniscus*).

***Eridolius pachysoma* (Stephens, 1835)**

DOWN: Rostrevor, ♂ 20 June 1929, woods, WFJ (Johnson, 1930: p. 157 as *Exenterus* (*Cteniscus*)).

****Eridolius pictus* (Gravenhorst, 1829)** **New to Ireland**

DOWN: Donard Lodge (Lo), 30 July 1957, AWS (NMI).

***Eridolius romani* (Kerrich, 1952)**

DUBLIN: Slade of Saggart {Saggart}, ♀ 16 September 1942, AWS (NMI, paratype);

WICKLOW: Deputy's Pass, ♂ 11 September 1932, AWS (Kerrich, 1952: p. 430 as *Cteniscus*).

Ireland (Kerrich, 1952: p. 458 as *Cteniscus*).

***Eridolius rufilabris* (Holmgren, 1857)**

KILDARE: Kilkea Park, ♀ 26 June 1933, AWS (BMNH) (det GJK); WICKLOW: Devil's Glen, ♀ (2) 15 May 1938, AWS (BMNH) (Kerrich, 1962: p. 45 (as *Anisoctenion*)).

***Eridolius rufonotatus* (Holmgren, 1857)**

WICKLOW: Rathdrum, ♀ 13 August 1925, AWS (Kerrich, 1952: p. 439 as *Cteniscus*).

Ireland (Kerrich, 1952: p. 458 as *Cteniscus*).

***Exyston calcaratus* Thomson, 1883**

WICKLOW: Monagloch, ♀ 8 June 1926, AWS (Kerrich: 1952: p. 39 as *Parexyston*).

Ireland (Kerrich, 1952: p. 458 as *Parexyston*).

***Exyston pratorum* (Woldstedt, 1874)**

synonym *Exyston brevipetiolatus* Thomson, 1883

CORK (W.): Glengarriff, ♀ (Kerrich, 1952: p. 387); DOWN: Rostrevor, ♀ 20 June 1929, WFJ (NMI) (det. Kerrich as *Exyston brevipetiolatus*) (unpublished); LAOIS (Queen's Co.): north of Emo Park, 2♀♀ {15 August 1937} (NMI); Portarlington, ♂ {26 July 1936} (NMI); Woodbrook, ♂; TIPPERARY (S.): Ballinacourty, ♀ {12 June 1945} (NMI); WATERFORD: Dungarvan, ♀; WICKLOW: Arklow district (dist.), ♂ {4 June 1926} (NMI); Athdown, 2♀♀; Ballinclea, ♂ {11 August 1940} (NMI); Clara, 3♂♂ (one seen by A. Roman); Deputy's Pass, ♀ (Kerrich, 1952: p. 387 4-26 June and 26 July-16 August 1925-1945, A. W. Stelfox).

Ireland (Kerrich, 1952: p. 370 as *Exyston brevipetiolatus*. So he sent from his own collection a male specimen of a species he had taken frequently in Ireland, had not identified with any other author's description, but thought most likely to be Haliday's *phaeorrhaeus*. Roman identified it with *brevipetiolatus* Thoms., and agreed with the conclusion. I have now seen the actual specimen and agree with the identification;

Kerrich, 1952: p. 458 as *Exyston pratorum*; Yu, 1998: CD-Rom).

***Exyston sponsorius* (Fabricius, 1781)**

synonym *Exyston cinctulus* (Gravenhorst, 1820)

DUBLIN: Glenasmole, ♂♀ {♂ 15 July 1928} (NMI); KERRY (S.): Coumloughra Reeks, ♂; Darrynane, ♀; WESTMEATH: Lough Owel, ♂; WICKLOW: Coan, 3♂♂; Glenmacnass, ♂♀ (all Kerrich, 1952: p. 373 as *Exyston cinctulus*); Glenmalure, ♂ 3 June 1926, AWS (NMI) (det. GJK as *Exyston cinctulus*) (unpublished); Greystones, ♀ {3 July 1930} (NMI); King's River, ♂ (all Kerrich, 1952: p. 373 as *Exyston cinctulus*. 8 June-15 July, 1928-1937, A. W. Stelfox *et al*. A dark form is found in Ireland).

Ireland (Kerrich, 1952: p. 458 as *Exyston cinctulus*).

***Exyston subnitidus* (Gravenhorst, 1829)**

synonym *Exyston phaeorrhaeus* (Haliday, 1839)

Ireland (Morley, 1911b: p. 207 as *Exenterus phaeorrhoeus*. Haliday gives no locality; but, from his MS. in the Dublin Museum, it is evidently that he himself took it commonly in Ireland; Kerrich, 1952: pp 369-370 as *Cteniscus phaeorrhaeus*. Stelfox sent me Morley's lectotype for examination, and wrote that in his opinion it could not be the type and that Roman has agreed with this...it must be rejected...On first glancing at the box from the part of the Haliday collection relevant to the present study...I caught sight of what I took to be a large dark male...This specimen I designate the type. The pinhead bears green sealing-wax...Finally it may be noted that Morley (1911) provided a false clue by misinterpreting Haliday's manuscript catalogue, in which there stands against *phaeorrhaeus* the mark for 'certainly Irish' but not the mark indicating 'common or in many collections'; pp 379-380 redescribed from the following material: Ireland, unlocalized, type ♂, A. H. Haliday).

Ireland (Kerrich, 1952: p. 458 as *Exyston phaeorrhaeus*; Fitton, 1976: p. 335 as *Tryphon* (*Cteniscus*). Holotype ♂...(NMI)).

***Kristotomus laetus* (Gravenhorst, 1829)**

CLARE: Clooncoose, ♂ 22 July 1924, AWS (Kerrich, 1952: p. 347 as *Anisoctenion*. Variety *marginatus* Thomson, 1883); DUBLIN: Slade of Saggart, ♀ 22 July 1936,

AWS (Kerrich, 1952: p. 347 as *Anisoctenion*. Variety *calcaratus* Thomson, 1883); SLIGO: Toberscanavan, ♀ 22 July 1933, AWS (NMI) (Kerrich, 1952: p. 347 as *Anisoctenion*. Variety *marginatus* Thomson, 1883).

Ireland (Kerrich, 1952: p. 458 as *Anisoctenion*).

***Kristotomus triangulatorius* (Gravenhorst, 1829)**

MAYO (W.): Old Head, ♂ 21 May 1942, AWS (NMI); WICKLOW: Devil's Glen, ♀ 23 April 1929, AWS; Glenmore Castle, ♀ 16 June 1934, AWS; Powerscourt Deerpark, 2♂♂ 27 May 1932, on oak *Quercus*, AWS; Powerscourt Demense, 2♂♂ 25 May 1932, on oak *Quercus*, AWS (NMI) (all Kerrich, 1952: p. 327 as *Anisoctenion*).

Ireland (Kerrich, 1952: p. 458 as *Anisoctenion*; Jussila, 1967: p. 108).

***Smicroplectrus heinrichi* Kerrich, 1952**

DUBLIN: Dublin district (dist.), ♀ emerged *circa* 4 May 1932, *ex* sawfly larva, G. C. Scott; Glenasmole, ♂ 23 May 1930, 2♂♂ 3 June1934, ♂ 21 May 1939 (paratype, NMI), AWS; KILDARE: Sallins, ♀ 17 May 1933, AWS (paratype, NMI) (all Kerrich, 1952: p. 409); MAYO (W.): Old Head, ♂3♀♀ (one the type), 28 May 1942, (paratype, NMI), AWS (Kerrich, 1952: p. 409; Fitton, 1976: p. 336 holotype ♀ (BMNH)); WICKLOW: Athdown, ♂ 1 May 1933, J. F. Perkins; George's Bridge, ♂ 1 May 1949, AWS (Kerrich, 1952: p. 409 I first received this species in good series from Ireland from A. W. Stelfox).

Ireland (Kerrich, 1952: p. 458).

[*Smicroplectrus quinquecinctus* (Gravenhorst, 1820)

synonym *Smicroplectrus trianguligena* Kerrich, 1952

ARMAGH: Poyntzpass, June, on the hill, WFJ (Johnson, 1915: p. 132; Kerrich, 1952: p. 397 The Irish record of this species (W. F. Johnson, 1915: p.132) is based on a male of *Acrotomus succinctus*); DUBLIN: Glenasmole, ♂ 21 May 1939, AWS; WICKLOW: George's Bridge, ♂ 19 May 1940; Powerscourt, 2♂♂ emerged 4-11 May 1932, *ex* sawfly larvae, G. C. Scott (all Kerrich, 1952: p. 401 as *Smicroplectrus trianguligena*. Provisionally I place here four small male specimens...confirmation of the occurrence of this species in Ireland by the capture of the female is much to be

desired).

Ireland (Kerrick, 1952: p. 458 record rejected; Kerrich, 1952: p. 458 as *Smicroplectrus trianguligena*. Record requiring confirmation).

According to a notation by A. W. Stelfox on page 200 in the National Museum of Ireland's copy of Morley (1911b), the above record is an error. The specimen is a ♂ *Aerotomus succinctus fide* Kerrich, 1947). This species is given as certain in Broad (2006)]

Oedemopsini

***Cladeutes discedens* (Woldstedt, 1874)**

synonym *Eclytus haematothorax* Strobl, 1903

DOWN: no locality (Fitton and Ficke, 1990: p. 208); Newcastle, north slope of Drinnahilly, ♂ 8 July 1964, ♂ 24 July 1964, ♂ 2 August 1964 (BMNH), ♂ 6 August 1964, taken on the leaves of the same laurel *Prunus laurocerasus* bush, AWS; Tollymore Park, ♀ 12 May 1961, swept off Scots pine *Pinus sylvestris*, AWS; WICKLOW: Ballylusk, near Ashford, ♀ 21 April 1933, beaten from hazel *Corylus* just coming into leaf, AWS; The Deputy's Pass, ♀ 24 July 1929 and ♀ 12 March 1933, the latter beaten from hazel *Corylus* just coming into leaf, AWS (Stelfox, 1966a: p. 510 as *Eclytus discedens*).

***Hercus fontinalis* (Holmgren, 1857)**

ARMAGH: Poyntzpass, June, in back avenue, WFJ (Johnson, 1915: p. 132 as *Eclytus*); DOWN: no locality {Tollymore Park (Pk), ♀ 8 September 1965, AWS (NMI) (det. AWS and conf. RWC)}; DUBLIN: no locality; LOUTH: no locality; MAYO (West): no locality; MEATH: no locality; WICKLOW: no locality (all Stelfox, 1966a: p. 511 as *Eclytus*. 30-40 specimens...the majority coming from Co. Wicklow...on dates between 19th April and 29th September).

Ireland (Fitton and Ficken, 1990: p. 209 uncommon but widely distributed throughout).

***Oedemopsis scabricula* (Gravenhorst, 1829)**

MAYO: Portlea, Clare Island, ♀♀ July 1910, swept at "the wood", CM (NMI) (conf.

L. Ficken) (Morley, 1911a: p. 13 as *Oedematopsis*).

Ireland (♂♀ Haliday Collection (NMI) (det. L. Ficken as *Hybophanes*)).

Phytodietini

***Netelia* (*Bessobates*) *cristata* (Thomson, 1888)**

DOWN: Rostrevor, ♀ 5 and 6 September 1929, in house at light, WFJ (NMI) (Johnson, 1930: p. 158 as *Paniscus*).

***Netelia* (*Bessobates*) *latungula* (Thomson, 1888)** **New to Ireland**

ANTRIM: Murlough Bay (B.), 2 June 1939, AWS (NMI); DOWN: Tollymore Park (Pk), 19 May 1957 and 16 May 1961, AWS (NMI); MAYO: Old Head, 2 June 1942, AWS (NMI); SLIGO: Trawalua, 12 June 1959, AWS (NMI); WICKLOW: Athdown, 2 May 1948, AWS (NMI); Devil's Glen, 20 May 1932, AWS (NMI).

***Netelia* (*Bessobates*) *virgata* (Geoffroy, 1790)** **New to Ireland**

DOWN: Newcastle, 11 September 1955, AWS (NMI); Rostrevor, August 1930, WFJ (NMI); MAYO: Old Head, 14 September 1941, AWS (NMI); same locality, 26 June 1942, "under sack", Donald Wallace (NMI); WICKLOW: Clara, 8 May 1940, AWS (NMI); Imaal, 28 July 1940, AWS (NMI).

***Netelia* (*Netelia*) *fuscicornis* (Holmgren, 1860)**

synonym *Netelia gracilipes* (Thomson, 1888)

DOWN: Greencastle, ♂ August 1930, in field, Mrs Johnson (NMI) (Johnson, 1931c: p. 141 as *Paniscus*); Rostrevor, October 1922, to light in house, WFJ (NMI) (Johnson, 1923: p. 38 as *Paniscus gracilipes*); same locality, ♂♂ 13 August 1929 and 23 September 1929, house and vicarage at light, WFJ (NMI) (Johnson, 1929: p. 158 as *Paniscus gracilipes*); same locality, ♂ 10 June 1929, vicarage at light, WFJ (NMI) (Johnson, 1930: p. 158 as *Paniscus*).

***Netelia* (*Netelia*) *melanura* (Thomson, 1888)**

ARMAGH: Poyntzpass, in Acton Wood, June, on the wing, not a common species, WFJ (NMI) (Johnson, 1916a: p. 21 as *Paniscus*); Poyntzpass field, September, at sallows *Salix*, WFJ (NMI) (Johnson, 1920a: p. 10 as *Paniscus*); DOWN: Dundrum, ♂

June 1926, WFJ (Johnson, 1927: p. 161 as *Paniscus*); Rostrevor, ♀ 4 July 1930, vicarage, WFJ (NMI) (Johnson, 1931a: p. 54 as *Paniscus*).

******Netelia* **(***Netelia***)** ***ocellaris*** **(Thomson, 1888)** **New to Ireland**

DOWN: Rostrevor, 17 September 1931, 15 July and 9 September 1932, WFJ (NMI); KERRY: Killarney, 1927, EFB (NMI) (det. AWS).

***Netelia* (*Netelia*) *testacea* (Gravenhorst, 1829)**

DONEGAL: Portnoo sandhills, WFJ (Johnson, 1920a: p. 10 as *Paniscus*); DOWN: Newcastle, ♀ September 1926, in window, WFJ (NMI) (Johnson, 1927: p. 161 as *Paniscus*).

***Netelia* (*Paropheltes*) *tarsatus* (Brischke, 1880)**

DOWN: Rostrevor, ♂♂ 20 and 27 May 1929, woods, WFJ (NMI) (Johnson, 1930: p. 158 as *Paniscus* (*Parabatus*); MAYO: Clare Island, ♀ September 1910, WFJ (Morley, 1911a: p. 14 as *Paniscus*).

[*Phytodietus* (*Phytodietus*) ?*arcuatorius* (Thunberg, 1824)

synonym *Phytodietus crassitarsis* Thomson, 1877

DUBLIN: Glenasmole, ♀ 13 June 1933, JFP (BMNH) (det GKK as ?*crassitarsis*) Ireland (Broad, 2006 compared to type by GKK and found to differ).]

***Phytodietus* (*Phytodietus*) *astutus* Gravenhorst, 1829**

synonym *Phytodietus* (*Phytodietus*) *obscurus* Desvignes, 1856

DONEGAL: Portnoo, cliff, June, WFJ (NMI) (det. AR) (Johnson, 1921a: p. 106 as *Phytodietus obscurus*); DOWN: Rostrevor, June 1925, WFJ (NMI); LOUTH: Termonfeckin, July 1924, WFJ (both Johnson, 1927: p. 160 as *Phytodietus obscurus*. ♂♀).

***Phytodietus* (*Phytodietus*) *gelitorius* (Thunberg, 1824)**

synonym *Phytodietus coryphaeus* Gravenhorst, 1829

ARMAGH: Poyntzpass, August, garden, WFJ (NMI) (Johnson, 1921a: p. 106 as *Phytodietus coryphaeus*. A dark form); DOWN: Dundrum, ♀♀ June and August 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Phytodietus coryphaeus*); Greencastle, ♂ 15 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Phytodietus*

coryphaeus); Newcastle, ♀ 27 August, WFJ (NMI) (Johnson, 1929: p. 136); Rostrevor, ♀ [?39] 31 May 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157 as *Phytodiaetus coryphaeus*. Var. vertex immaculate); KERRY (South): no locality, June 1902 (Saunders *et al*., 1903: p. 68 as *Phytodietus coryphaeus*; Morley, 1908a: p. 244 as *Phytodietus coryphaeus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Phytodietus coryphaeus*); Termonfeckin, August 1924, WFJ (Johnson, 1927: p. 160 as *Phytodietus coryphaeus*. Var., hind coxae entirely black); MAYO: near Westport, 2♂♂ July 1911, JNH (Morley, 1911a: p. 13 as *Phytodiaetus coryphaeus*).

***Phytodietus* (*Phytodietus*) *geniculatus* Thomson, 1877**

DOWN: Newcastle, ♀♀ 7 and 13 June, flying round young oak *Quercus* trees, WFJ (NMI) (Johnson, 1929: p. 136).

***Phytodietus* (*Phytodietus*) *polyzonias* (Forster, 1771)**

DONEGAL: New Lough, Dunfanaghy, ♂ 11 June 1955, AWS (NMI) (det. AWS) (unpublished); WEXFORD: Courtown (Courten), 2♀♀ 8 September 1893, AB (Morley, 1908a: p. 242).

Tryphonini

***Cosmoconus ceratophorus* (Thomson, 1888)** **New to Ireland**

DOWN: Newcastle, 4 September 1955, AWS (NMI); KILDARE: Landenstown, 3 August 1940 and 4 August 1949, AWS (NMI); WICKLOW: Devil's Glen, 24 July 1940, AWS (NMI); Woodend, 10 August 1956, AWS (NMI).

***Cosmoconus elongator* (Fabricius, 1775)**

ANTRIM: Killead, ♀ August 1923, WFJ (Johnson, 1927: p. 160 as *Tryphon*); ARMAGH: Poyntpass, ♀ 30 July 1909, WFJ (NMI) (Johnson, 1912a: p. 79 as *Tryphon*); Richhill, ♂ 14 September 1909, HLO (NMI); DONEGAL: Coolmore, {21, 24 and 30} August and {5 and 9} September 1912, WFJ (NMI) (Johnson, 1913: p. 140); Coolmore on Owen's Fort, {14} September 1916, at flowers of wild carrot *Daucus carota*, WFJ (NMI) (Johnson, 1917a: p. 39 as *Tryphon*); Portnoo, September 1917, WFJ (NMI) (Johnson, 1918: p. 109 as *Tryphon*); DOWN: Dundrum, ♀ July

1926, WFJ (Johnson, 1927: p 160 as *Tryphon*); Greencastle, ♀ August 1930, common on roadside, WFJ (Johnson, 1931c: p. 140 as *Casmoconus*); Newcastle, ♀♀ 9, 17 and 27 August, WFJ (NMI) (Johnson, 1929: p. 137); Rostrevor, ♀ September 1923, WFJ (NMI) (Johnson, 1927: p 160 as *Tryphon*); Warrenpoint, ♀♀ 16 August and 15 September, WFJ (Johnson, 1929: p. 137 as *Coeloconus*); KERRY: Kenmare, ♀ 7 July 1901, JWY (Morley, 1902: p. 55 as *Tryphon*; Morley, 1911b: p. 180 as *Tryphon*); LOUTH: Termonfeckin, ♀ July 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Tryphon*); WATERFORD: Cappoquin, Dungarvan, ♀♀ 14 August 1928, AWS (NMI) (det. AWS as *Tryphon*) (unpublished); WEXFORD: Enniscorthy; Kilmore (both Morley, 1911b: p. 180 as *Tryphon*).

***Ctenochira arcuata* (Holmgren, 1857)**

DOWN: Newcastle, ♂ 24 August {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Polyblastus*); Rostrevor, ♂ 13 June 1929, woods, WFJ (NMI) (Johnson, 1930: p. 157 as *Polyblastus*); LOUTH: Dundalk, ♂ 15 July {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Polyblastus*. Var. hind femora red).

***Ctenochira genalis* (Thomson, 1883)** **New to Ireland**

WICKLOW: Glending, ♂ 8 September 1940, AWS (NMI) (det. JFP).

***Ctenochira haemosterna* (Haliday, 1839)**

Ireland (Haliday, 1839: p. 112 as *Tryphon.* On willows...May, etc; Fitton, 1976: p. 335 as *Tryphon*. Syntypes ♀...lost...the name remains a *nomen dubium*).

***Ctenochira marginata* (Holmgren, 1857)**

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Polyblastus*); ARMAGH: Poyntzpass field, {17} September {1919}, at sallows *Salix*, WFJ (NMI) (Johnson, 1920a: p. 10 as *Polyblastus*); DONEGAL: Coolmore, {19 September 1914}, at the flowers of wild carrot *Daucus carota* on a roadside, WFJ (NMI) (Johnson, 1915: p. 132 as *Polyblastus*); DOWN: Dundrum, ♂ {3} June 1926, WFJ (NMI) (Johnson, 1927: p. 160 as *Polyblastus*).

***Ctenochira pastoralis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {21} June 1916, in field, WFJ (NMI) (Johnson, 1917a: p. 40

as *Polyblastus*); Poyntzpass field, {19} August {1919}, at hogweed *Heracleum*, WFJ (NMI) (Johnson, 1920a: p. 10 as *Polyblastus*); DONEGAL: Portnoo, ♂ 30 June 1920, WFJ (NMI) (det. AR as *Scopimenus*) (unpublished); DOWN: Newcastle, August 1926, WFJ (NMI); Rostrevor, {29} June and September 1923, {31} May 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Polyblastus*. ♂♀); same locality, ♀ 12 June 1929, grass plot, WFJ (NMI) (Johnson, 1929: p. 157 as *Polyblastus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Polyblastus*).

***Ctenochira pratensis* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, Acton Wood, {16} June {1915}, rare, WFJ (NMI) (Johnson, 1917a: p. 40 as *Polyblastus*); Poyntzpass, in fields, {24} August {1920}, WFJ (NMI) (Johnson, 1921a: p. 106 as *Polyblastus*); DONEGAL: {5} September {1918}, bog road and cliff, WFJ (NMI) (Johnson, 1919a: p. 37 as *Polyblastus*); DOWN: Newcastle, ♀ 11 June {1927}, WFJ (NMI) (Johnson, 1929: p. 137 as *Polyblastus*); Rostrevor, ♂ {3} June 1924, WFJ (NMI) (Johnson, 1927: p. 160 as *Polyblastus*).

***Ctenochira propinqua* (Gravenhorst, 1829)**

Ireland (Broad, 2006).

***Ctenochira sphaerocephala* (Gravenhorst, 1829)**

ARMAGH: Poyntzpass, {10} August 1916, in field, WFJ (NMI); DONEGAL: Coolmore, {2} September 1916, on roadside among herbage, WFJ (NMI) (both Johnson, 1917a: p. 40 as *Polyblastus*); LOUTH: Carlingford, June 1921, WFJ (Johnson, 1922a: p. 17 as *Polyblastus*).

***Ctenochira xanthopyga* (Holmgren, 1857)**

synonym *Polyblastus rivalis* Holmgren, 1857

ANTRIM: Killead, August 1923, WFJ (NMI) (Johnson, 1927: p. 160 as *Polyblastus rivalis*); ARMAGH: Poyntzpass field, August, at hogweed *Heracleum*, WFJ (Johnson, 1920a: p. 10 as *Polyblastus rivalis*; Johnson, 1921a: p. 106 as *Polyblastus rivalis*); DONEGAL: Coolmore, {14} September 1916, among sallows *Salix*, rare, WFJ (NMI) (Johnson, 1917a: p. 40 as *Polyblastus rivalis*); Portnoo, June, WFJ (Johnson, 1919a: p.37 as *Polyblastus rivalis*); same locality, {6} September 1917, at sallows *Salix*, WFJ

(NMI) (Johnson, 1918: p. 109 as *Polyblastus rivalis*); MAYO: Westport, ♂ July 1911, CM (Morley, 1911a: p. 14 as *Polyblastus rivalis*).

***Dyspetes luteomarginatus* Habermehl, 1925**

Ireland (Broad, 2006).

***Dyspetes praerogator* (Thomson, 1883)**

ARMAGH: Poyntzpass, 30 July 1909, WFJ (NMI) (det. CM) (Johnson, 1912a: p. 79. Mr Morley gives Enniscorthy and Courtown as Irish localities); CORK: Corkbeg, ♂ July 1925, RAP (NMI) (det. AWS) (unpublished); DONEGAL: Carndonagh, ♂ 26 August 1933, RCF (NMI) (det. MRS) (unpublished); Portnoo, ♂♂♀♀ September 1917, cliff, WFJ (NMI) (Johnson, 1918: p. 109; Johnson, 1919a: p. 36 as *Dyspetes praevogator* (mispelling)); DOWN: Greencastle, ♀ 28 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140); Newcastle, September 1926, WFJ; Rostrevor, September 1923, WFJ (NMI) (Johnson, 1927: p. 160. ♂♀); WATERFORD: Lismore, Dungarvan, ♀ 15 August 1928, AWS (NMI) (det. AWS) (unpublished); WEXFORD: Courtown (Courten), AB; Enniscorthy, AB (both Morley, 1911b: p. 172; WICKLOW: Bray Head, ♂ 15 September 1921, AWS (NMI) (det. WFJ); Meeting of the Waters, ♂ 13 October 1929, AWS (NMI) (det. AWS) (both unpublished). There is a large number of specimens named by AWS in NMI and only some are mentioned above.

***Erromenus brunnicans* (Gravenhorst, 1829)**

DONEGAL: Portnoo mountain road, {26} June {1919}, WFJ (Johnson, 1920a: p.10).

***Erromenus calcator* (Müller, 1776)**

DOWN: Murlough NNR, ♀ June 1976, RN (UM) (det. MRB and RN) (unpublished); Rostrevor, ♀ 5 July 1930, field opposite, WFJ (NMI) (Johnson, 1931a: p. 54 var. *scutellaris* Hlgm).

***Erromenus junior* (Thunberg, 1824)** **New to Ireland**

synonym *Erromenus fenator* (Gravenhorst, 1829)

ARMAGH: Poyntzpass, ♀ 5 September 1921, WFJ (NMI) (det. AR as *Erromenus frenator*).

***Erromenus punctulatus* Holmgren, 1857**

ANTRIM: Killead, ♂ August 1923, WFJ (NMI) (Johnson, 1927: p. 160); ARMAGH: Poyntzpass, {25} August {1913}, in fields, on angelica *Angelica*, WFJ (NMI) (Johnson, 1914a: p. 67).

******Grypocentrus albipes* **Ruthe, 1855** **New to Ireland**

CAVAN: Killykeen, 25 August 1939, RCF (NMI); WICKLOW: Athdown, 23 June 1937 and 19 June 1938, AWS (NMI); Clara, 12 May 1940, AWS (NMI).

******Grypocentrus basalis* **Ruthe, 1855** **New to Ireland**

WICKLOW: Deputy's Pass, 8 May 1932, AWS (NMI).

***Monoblastus brachyacanthus* (Gmelin, 1790)**

ARMAGH: Poyntzpass, {21} August 1916, in field, WFJ (NMI) (Johnson, 1917a: p. 39 as *Tryphon*); DOWN: Newcastle, ♂ 11 August {1927} and ♀ 25 August {1927}, WFJ (NMI) (Johnson, 1929; p. 137 as *Coeloconus*); Rostrevor, 14 August 1929, river, WFJ (NMI) (Johnson, 1930: p. 157 as *Tryphon* (*Coeloconus*)); Tullybrannigan, ♀ 18 July 1957, AWS (NMI) (det. AWS); WATERFORD: Stradbally, ♂♂ 18 August 1928, AWS (NMI) (det. AWS) (both unpublished).

***Polyblastus* (*Labroctonus*) *alternans* Schiødte, 1839**

synonym *Polyblastus albicoxa* Thomson, 1883

DOWN: Newcastle, ♀ 11 June {1927}, WFJ (NMI) (Johnson, 1929: p. 137).

***Polyblastus* (*Labroctonus*) *westringi* Holmgren, 1857**

DOWN: Donard Lodge, ♂♀♀ 11 September 1955, AWS (NMI) (det. AWS and JFP) (unpublished); MAYO: Brackloon Wood, ♀ August 1911, PEG (Morley, 1911a: p. 14; Morley, 1911b: p. 301).

***Polyblastus* (*Polyblastus*) *pedalis* (Cresson, 1864)**

synonym *Polyblastus carbonator* Kasparyan, 1970

ANTRIM: Breen, 3 June 1939, AWS (NMI); DUBLIN: Slade Brook (Bk), emerged 19 May 1942 ex sawfly larva collected on 21 September 1941, AWS (NMI); CAVAN: Farnham, emerged 7 August 1947 ex nematine larva on *Salix cinerea* collected on 5 July 1947, RCF (NMI); WICKLOW: Clara, 8 June 1926, AWS (NMI) (all as *carbonator*) (all unpublished).

Ireland (Yu, 1998: CD-Rom).

***Polyblastus* (*Polyblastus*) *subalpinus* Holmgren, 1857** **New to Ireland**

DUBLIN: Rathdrum, 19 June 1925, Rev. G. Foster (NMI).

***Polyblastus* (*Polyblastus*) *wahlbergi* Holmgren, 1857**

Ireland (Broad, 2006).

***Polyblastus* (*Polyblastus*) *varitarsus* (Gravenhorst, 1829)**

ANTRIM: no locality, August, JJK (Johnson, 1918: p. 109 as *P. variitarsus*); ARMAGH: Poyntzpass, July and 23 August 1920 (NMI) (det. AR), in fields, at Angelica, WFJ (NMI) (Johnson, 1914a: p. 67; Johnson, 1921a: p. 106 as *P. variitarsus*); DONEGAL: Coolmore, {25} September {1915}, among sallows *Salix*, WFJ (NMI) (Johnson, 1916a: p. 21); Portnoo, {3} June {1918} and {9} September {1918}, cliff, WFJ (NMI) (Johnson, 1919a; p. 37 as *Polyhlastus* (misspelling) *variitarsus*); DOWN: Greencastle, ♀ 18 August 1930, roadside, WFJ (NMI) (Johnson, 1931c: p. 140 as *Polyblastus variitarsus*); Rostrevor, September 1922 and 1923, WFJ (NMI) (Johnson, 1923: p. 38 as *Polyblastus variitarsus*; Johnson, 1927: p. 160 as *Polyblastus variitarsus*); LOUTH: Carlingford, June 1921, WFJ (NMI) (Johnson, 1922a: p. 17 as *Polyblastus variitarsus*).

Ireland (Morley, 1911b: p. 295 as *Polyblastus variitarsus*. In 1832, Haliday wrote that they "occur in August and September on Willows and Ragwort" in Ireland; Yu, 1998: CD-Rom).

***Polyblastus* (*Polyblastus*) *wahlbergi* Holmgren, 1857**

{WICKLOW} (V.C. H.20): no locality (Shaw and Kasparyan, 2005: p. 3).

[*Tryphon* sp.

CORK: Glengariff, 20.June1901, JWY (Morley, 1902: p. 55).]

***Tryphon* (*Stenocrotaphon*) *obtusator* (Thunberg, 1824)** **New to Ireland**

synonym *Tryphon consobrinus* Holmgren, 1855

DONEGAL: no locality, C. W. Buckle (as *consobrinus*) (NMI).

***Tryphon* (*Stenocrotaphon*) *subsulcatus* Holmgren, 1855**

DOWN: Newcastle, ♀ 23 June, WFJ (Johnson, 1929: p. 137).

******Tryphon* **(*Symboethus*)** ***bidentatus*** **Stephens, 1835** **New to Ireland**

DUBLIN: Saggart, 20 June 1943, AWS (NMI); TIPPERARY: Ballinacourty (B'c't'y), 12 June 1945, AWS (NMI); Clady River (R.), 12 June 1945, AWS (NMI); WICKLOW: Glenmalur, 30 May 1940, AWS (NMI).

***Tryphon* (*Symboethus*) *brunniventris* Gravenhorst, 1829**

ARMAGH: Poyntzpass, August 1916, in field, WFJ (Johnson, 1917a: p. 39); CORK: Glengariff, June 1901, JWY (Morley, 1911b: p. 187 erroneously gives the county as Kerry); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 140); Coolmore on Owen's Fort, {7} September 1916, at flowers, WFJ (NMI) (Johnson, 1917a: p. 39); Portnoo, roadside and shore, {4 and 10} June {1919}, 14 June 1920 (NMI) (det. AR var. *incestus*), WFJ (Johnson, 1920a: p. 9; Johnson, 1921a: p. 106 var. *incestus* Holmgren); DOWN: Dundrum, ♂ {3 and 16} June 1926, WFJ (NMI) (Johnson, 1927: p. 160 var. *connectans* Roman); Rostrevor, ♂ {24} June 1925, WFJ (NMI) (Johnson, 1927: p. 160 var. *incestus* Holmgren); same locality, ♂ 27 June 1930, field opposite, WFJ (Johnson, 1931a: p. 54 var. *connectans* Roman); MAYO: Carrowmore Lough, single specimen 18 July 1910, swept from reeds, CM (Morley, 1911a: p. 13; Morley, 1911b: p. 188); chapel at the extreme top of Croaghpatrick, 2510ft, 20♀♀ 14 July 1910, flying to the door and doorposts which were very hot in a blazing sun, CM (Morley, 1911a: pp 13-14 there were great numbers of them (at the chapel), and one can only suppose them to have been carried up by an air-current; Morley, 1911b: p. 188).

***Tryphon* (*Tryphon*) *atriceps* Stephens, 1835**

synonym *Tryphon ephippium* Holmgren, 1857

DOWN: Greencastle, along the shore towards Mill Bay, ♀ 9 August 1930, WFJ (NMI) (Johnson, 1931c: pp 140-141 *teste* Dr Roman).

******Tryphon* **(*Tryphon*)** ***latrator*** **(Fabricius, 1781)** **New to Ireland**

synonym *Tryphon auricularis* Thomson, 1883

ARMAGH: Poyntzpass, 10 August 1915, field, WFJ (as *auricularis*) (NMI); DONEGAL: Coolmore, 3 September 1912, WFJ (as *auricularis*) (NMI); DOWN:

Rostrevor, 23 July 1927, WFJ (as *auricularis*) (NMI).

***Tryphon* (*Tryphon*) *relator* (Thunberg, 1824)** **New to Ireland**

DOWN: Rostrevor, ♀ 25 July 1931, WFJ (NMI) (det. AR).

***Tryphon* (*Tryphon*) *signator* Gravenhorst, 1829**

ARMAGH: Poyntzpass, in Acton Wood, June, WFJ (NMI) (Johnson, 1916a: p. 20); DONEGAL: Portnoo, cliff, ♀ July (label states 18 June1920), WFJ (NMI) (det. AR) (Johnson, 1921a: p. 106); DOWN: Dundrum, ♀♀ June, July and August 1926, WFJ (NMI) (Johnson, 1927: p. 160); Greencastle, ♀ 22 August 1930, sandhills, WFJ (NMI) (Johnson, 1931c: p. 140); Newcastle, ♂ 9-23 June and ♀ 29 June, WFJ (NMI) (Johnson, 1929: p. 137).

***Tryphon* (*Tryphon*) *thomsoni* Roman, 1939**

synonym *Tryphon vulgaris* misidentified

ARMAGH: Poyntzpass, August 1916, in field, WFJ (Johnson, 1917a: p. 39 as *Tryphon vulgaris*); CORK: Glengariff, 23 June1901, JWY (Morley, 1902: p. 55 as *Tryphon braccatus*. The locality is erroneously given as in Kerry; Morley, 1911b: p. 185 as *Tryphon vulgaris*. This was misnamed as *T. braccatus* in Morley (1902)); DONEGAL: Coolmore, September 1912, WFJ (Johnson, 1913: p. 140 as *Tryphon vulgaris*); DOWN: Greencastle, ♂ 19 August 1930, roadside, WFJ (Johnson, 1931c: p. 140 as Tryphon vulgaris); Rostrevor, {24} July 1922, WFJ (NMI) (Johnson, 1923: p. 38 as *Tryphon vulgaris*); same locality, ♂ 19 July 1930, vicarage, WFJ (NMI) (det. AR as *Tryphon vulgaris*) (unpublished); MAYO: Carrowmore Hill, 500ft, ♂, CM (Morley, 1911a: p. 14 as *Tryphon vulgaris*).

***Tryphon* (*Tryphon*) *trochanteratus* Holmgren, 1857**

ARMAGH: Poyntzpass, {3} July {1914}, in field, WFJ (NMI) (Johnson, 1914a: p. 66); DOWN: Dundrum, August 1926, WFJ (NMI) (Johnson, 1927: p. 160); Rostrevor, ♀ 23 July, WFJ (Johnson, 1929: p. 137); KERRY: Loo Bridge, 6 July 1901, JWY (Morley, 1902: p. 55; Morley, 1911b: p. 184); MAYO: Louisburgh, ♂ 17 July 1910, CM (NMI) (Morley, 1911a: p. 14).

XORIDINAE

This is one of the smaller subfamilies of the Ichneumonidae with just under 200 described species. Currently the species are grouped into four genera, three of which are restricted to the north temperate zone while the fourth and largest, *Xorides*, is world-wide in distribution. Thirteen species representing three genera have been found in the British Isles.

Xoridine larvae develop as idiobiont external parasites of immature stages of wood-boring beetles, and possibly also woodwasps (Hymenoptera: Siricoidea). It seems certain that a wide spectrum of beetle hosts, living in woody tissue of both angiosperms and gymnosperms, is exploited. However, exact host relations are hard to establish in such situations and comparatively little is known in detail about host ranges of individual species and their more general biology. Although the larval stage of the host is probably most frequently attacked they are known to consume pupae and possibly pharate adults. Most species are probably solitary parasites, but at least one of the British Isles species, *Ischnoceros rusticus* (Geoffroy), is usually gregarious (broods of 1-5). One species-group of *Odontocolon* has wingless and brachypterous, as well as fully-winged, forms in North America, but the significance of these adaptations is unknown.

The female of *Xorides brachylabis* (Kriechbaumer) oviposits through the bark, using her ovipositor to drill into the host's gallery in the sapwood. After initial insertion of the ovipositor tip into the bark the sheaths are withdrawn and resume their normal position in line with the body. When the ovipositor has penetrated the host's gallery, which may be accomplished in about 15 minutes, the female stands motionless for a further period, perhaps 5 to 15 minutes. After egg laying the ovipositor is withdrawn by short jerks of the metasoma. The female then cleans herself and stands at the oviposition site for a few minutes, the whole oviposition sequence taking less than one hour. The host is always accurately located and a single egg placed on (and apparently stuck to) the cerambycid host larva. Only exceptionally is an egg found near, rather than on, a host. It is very likely that the host is stung

before the egg is laid because it becomes immobile; has a reduced heart rate; and if the xoridine egg fails to hatch dies after several weeks. The elongate fusiform egg has a short pedicel at one end. Incubation takes about 8 days and the newly hatched larva, after spending an hour or two moving about on the body of the host, begins feeding, burying its mandibles in the integument and sucking body fluids. The fully-grown larva constructs a cocoon in the host's gallery. Construction occupies from 3 to 5 days and the completed cocoon is thin-walled, transparent, rounded at both ends, and about twice the length and twice the diameter of the larva.

The fourth instar larva overwinters in the cocoon without any obvious change until sometime between the following April and September, when it assumes a prepupal form. The pupal stage itself is very short, lasting 9 or 10 days, although the adult does not leave the cocoon for a further 5 days. The adult uses its mandibles to gnaw through the wood and bark to escape.

***Ischnoceros caligatus* (Gravenhorst, 1829)**

synonym *Ischnoceros seticornis* Kriechbaumer, 1879

DOWN: Murlough House (Ho.), ♂ 2 2August 1957, dunes, AWS (NMI); KILDARE: Arthurstown (Arthurst'n), ♂ 16 August 1952, AWS (NMI); WATERFORD: Maghgiha, Dungarvan, ♀ 17 August 1928, AWS (NMI); WICKLOW: Askintinny, ♂♀ 23 August 1925, AWS (NMI); Meeting of the Waters, ♂ 24 July 1930, AWS (NMI) (all det. AWS) (all unpublished).

Ireland (Stelfox, 1928: p. 278 as *Ischnerus seticornis*. In April 1927, however, I captured two male *Ischnoceros* of a second species).

***Ischnoceros rusticus* (Geoffroy, 1785)**

synonym *Ischnocerus cornutus* Ratzeburg, 1848

synonym *Ischnoceros filicornis* Kriechbaumer, 1879

ANTRIM: Rea's Wood, 4♂♂ 30 May – 2 June1985, Malaise trap, 5-11 June 1985, Malaise trap, 16-18 May 1985, Malaise trap, 22 May 1985, MRB and RN (UM) (det. MRB and RN); DOWN: Murlough NNR, ♂♀ 7 June 1976, sand dunes, RN (UM) (det. MRB and RN) (all unpublished); Rostrevor, ♀♀ 27 and 31 May 1929, woods,

WFJ (NMI) (Johnson, 1930: p. 157); DUBLIN: no locality, AWS (Stelfox, 1928: p. 278 as *Ischnocerus filicornis*); KERRY (South): no locality, June 1902 (Saunders *et al*., 1903: p. 68 as *Ischnocerus cornutus*; Morley, 1908a: p. 14); WICKLOW: no locality, 1924-1926, {Clara, ♀ 12 June 1929, ♂ 19 May 1929; Cloghleague, ♂♀ emerged 4 April 1929; Powercourt District, ♂♂ 2 June1929 (conf MRB)}, AWS (Stelfox, 1928: pp 278-279 as *Ischnocerus filicornis*. In several places...I believe I have proof that it is parasitic on the larva of the beetle *Rhagium bifasciatum* Fabr. (Coleoptera: Cerambyciidae). Towards the close of summer the parasites leave the *Rhagium* larvae and spin dirty white, very elongate cocoons in clusters beneath the loose bark of rotting stumps and logs, from which the imagines emerge the following year from May to July. I have taken as many as eight or ten cocoons in one cluster, but I have no evidence how many parasites can be nourished by one host larva. Occasionally, I have found the cocoons singly). There is a large number of specimens in NMI and only a sample is given above.

***Odontocolon dentipes* (Gmelin, 1790)** **New to Ireland**

DOWN: Murlough NNR, 2♂♂ June 1976, sand dunes, RN (UM) (det. MRB and RN).

[*Xorides fuligator* (Thunberg, 1824)

synonym *Xylonomus pilicornis* Gravenhorst, 1829

ARMAGH: Poyntzpass, field, June, at hawthorn *Crataegus*, WFJ (Johnson, 1921a: p. 106 as *Xylonomus pilicornis*) (re-identified as *Xorides gravenhorstii* by MRB).]

***Xorides gravenhorstii* (Curtis, 1831)** **New to Ireland**

synonym *Xorides* (*Xorides*) *securicornis* (Holmgren, 1860)

ARMAGH: Poyntzpass, ♂ 4 June1920, field, WFJ (Johnson, 1921a: p. 106 as *Xylonomus pilicornis*) (re-identified as *Xorides gravenhorstii* by MRB); DOWN: Tollymore Park, ♀ 5 July 1961, AWS (NMI) (det. JFP as *Xorides* (*Xorides*) *securicornis*); DUBLIN: Raheny, ♀ 5 July 1925, on log at swan's nest, EOM (NMI); St Anne's, ♀ 8 June 1940, EOM (NMI); LAOIS (Queen's County): Portlaoise (Maryboro), ♂ 12 June 1927, RAP (NMI); WICKLOW: Clara, ♂♂ 29 May 1928, AWS (NMI) (all det. MB); TYRONE: Moy 2♂♂, ♀ 2 June 1985, hawthorn

Crataegus, herbaceous verge (♂♂s), 14 July (sic) (♀), MRB (UM) (det. MRB).

***Xorides praecatorius* (Fabricius, 1793)** **New to Ireland**

DUBLIN: Phoenix Park, 3 June 1943, AWS (NMI).

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Plate 1. ***Lampronota crenicornis*.**

Plate 2. ***Mesochorus sericans*.**

Plate 3. *Banchus farrani*.

The colour plates by John Curtis

Plate 1. Number 407. *Lampronota crenicornis* Curtis, 1832.

Current name: *Cylloceria melancholica* (Gravenhorst, 1829)

"In the Cabinets of Mr. Haliday and the Author". "Mr. Haliday says "It was found from the early part of August to the middle of September".

Plate 2. Number 464. *Mesochorus sericans* Curtis, 1833

Current name: *Astiphromma splenium* (Curtis, 1833)

"In the Cabinet of Mr. Haliday". "Taken by Mr. Haliday, I believe, near Belfast".

Plate 3. Number 588. *Banchus farrani* Curtis, 1836

Current name: *Banchus volutatorius* (Linnaeus, 1758)

"As I cannot consider this a variety I have named it after my esteemed friend Dr. Farran of Dublin, who was of our party in Connemara the end of last July, when I found a specimen flying about the plant figured, on the sand-hills near Roundstone".

The quotes are from the text accompanying the plates.

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